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THE PRINCIPLE OF EQUALIZATION APPLIED TO THE ALLOCATION OF GRANTS IN AID

BUREAU MEMORANDUM No. 66

FEDERAL SECURITY AGENCY
SOCIAL SECURITY ADMINISTRATION
Bureau of Research and Statistics

Washington 25, D. C.
September 1947

This memorandum has not been submitted to the Commissioner for Social Security nor to the Federal Security Administrator for formal consideration or approval. It is issued for limited distribution to the staff of the Social Security Administration, the Federal Security Agency, and other departments and agencies of the Government, and to others who are concerned with effective and equitable distribution of Federal aid to the States.

THE PRINCIPLE OF EQUALIZATION APPLIED TO THE ALLOCATION OF GRANTS-IN-AID

[illegible]

By
Byron L. Johnson

Bureau Memorandum No. 66

FEDERAL SECURITY AGENCY
SOCIAL SECURITY ADMINISTRATION

Washington 25, D.C. September 1947

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FOREWORD

In recent years there has been a growing interest in the use of Federal grants-in-aid to the States for programs and activities in which there is a national as well as a State concern. The Social Security Administration (formerly the Social Security Board) has had reason since it was first established to be deeply interested in the role and use of grants; it has responsibility for administering grant programs concerned with such diverse--and yet related--functions as public assistance, child health and welfare services, and unemployment compensation. Other constituent units of the Federal Security Agency also administer grant programs, concerned with vocational education and rehabilitation, public health, and the construction of hospitals and other health facilities. The grants administered by the Federal Security Agency total more than all other Federal grants to States combined. Public assistance grants alone currently provide almost half of all Federal aid to the States.

The bases upon which grants-in-aid are allocated among the States, and the Federal requirements as to State financial participation in the aided programs, determine in considerable measure the extent to which the purposes of the grant programs are achieved. The Bureau of Research and Statistics of the Social Security Administration, as well as other offices of the Federal Security Agency, have, therefore, long engaged in studies of the grant programs. This Bureau has given special attention to the financial problems and policies of these programs, and to inter-program financial relations.

This memorandum is concerned with an appraisal of present allocation and matching provisions for Federal grants, including effects on the States and their local units as well as on the governmental programs that are aided, and with the principles of equalization as applied to the financing of several major governmental functions. It was prepared by Mr. Byron L. Johnson, Chief of the Public Aid Section, and other members of the staff, especially Miss Cecile Goldberg, under the direction of Mr. Daniel S. Gerig, then Chief of the Division of Finance and Economic Studies.

This Bureau has, of course, a primary interest in the Federal grant-in-aid programs administered by the Social Security Administration. But, as is well known, allocation, matching and other provisions of these programs cannot be soundly evaluated without regard for the provisions in related programs administered by other parts of the Federal Security Agency and by other departments or agencies of the Federal Government. At the State and local levels, the effects of one program are interlocked with the effects of other programs, regardless of the particular Federal offices which administer the grants. Consequently, our special interest in social security programs could not wholly control, and this study had to deal with grant programs broadly. Nevertheless, special emphasis was given to the public assistance programs established under the Social Security Act.

In the background chapters, all Federal grants-in-aid to States, as here defined, are reviewed and the existing allocation and matching provisions are summarized and evaluated. In the latter part of the report, however, it was found necessary to restrict the more detailed analysis to a few of the major programs of the Federal Security Agency, notably those concerned with welfare, health, and education.

When this report was in preparation, those sections which deal with programs of constituent units of the Federal Security Agency were sent to them for comment. To the maximum extent possible, note was taken of the opinions and policies of the various constituent units. In some cases, it was not possible to achieve complete agreement on topics covered by this study and Mr. Johnson, assuming responsibility for the opinions he records, has not attempted in all cases to express what may be the opinion either of the Federal Security Agency or of its constituent units.

Though this study is primarily technical and objective, it unavoidably deals at some points with controversial subjects. Moreover, some of the author's analyses deal with matters that are beyond the reach of existing factual data and must rest in part on his own considered judgments, concerning which there may be legitimate differences of opinion. The views expressed in this report are, therefore, those of the author and do not necessarily represent the views of the Social Security Administration or the Federal Security Agency. This memorandum has not been submitted to the Commissioner for Social Security nor to the Federal Security Administrator for formal consideration or approval. It is issued for use by the staffs of the Social Security Administration, other constituent units of the Federal Security Agency, and other departments and agencies of the Government, and to others who are concerned with effective and equitable distribution of Federal aid to the States.

I. S. Falk, Director
Bureau of Research and Statistics

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CONTENTS

Page

Introduction.. xi

Part 1

Background

Chapter I. Historical Survey of the Development of Federal Grants.. 1
- Earliest Grants Favored Educational Purposes. 1
- Early Federal Grants Also Served Transportation and Communication...................... 2
- The Modern Grant Era........................ 3
- Effect of the Depression on Grants........... 4
- Grants-in-Aid During World War II........... 8
- Grants-in-Aid in the Postwar Period.......... 13

Chapter II. An Economic Interpretation of Grants-in-Aid...... 15
- Geographical Considerations.................. 15
- Economic Considerations...................... 15
- Fiscal Considerations........................ 16
- Administrative and Constitutional Considerations.. 18
- Purposes of Federal Grants................... 20
- Alternative Intergovernmental Fiscal Devices. 22

Chapter III. The Principle of Equalization...................... 30
- Types of Equalization........................ 30
- Some Consequences of Equalization............ 32
- Equalization Grants and the "National Minimum"..................................... 33

Chapter IV. Description and Evolution of Federal Grant Allocation.. 34
- Earliest Measures of Allocation.............. 34
- Measures of Allocation up to World War I...... 35
- Allocation Measures from World War I Until the Depression................................ 37
- Measures of Allocation During the 1930's...... 40
- Grants During World War II.................... 48
- Grant Actions of the Seventy-ninth Congress... 51

Part 2

Critical Analysis

Page

Chapter V. Descriptive Criticism of the Present Allocation of Grants.... 59
How Shall the Present Methods of Allocation be Tested?.... 59
The Basic Test.... 65
Analytical Tests Use Population to Measure Need.... 65
Analytical Use of Measures of Fiscal Ability. 67
Application of Valid Tests.... 69
Effect of Matching.... 72
Effect of Open-End Grants.... 75
Conclusion.... 87

Chapter VI. A Restatement of the Problem.... 88
Restatement of the Goals.... 88
Problems Associated with Grant Allocation.... 89
Summary.... 90

Part 3

Findings

Chapter VII. The Basic Equalization Formula.... 92
Mathematical Expression of the Basic Formula. 92
Modification of the Basic Formula.... 94
Graphic Demonstration of the Formula.... 95
Alternative Expressions of the Formula.... 100
Use of the Formula.... 101

Chapter VIII. Measurement of Need.... 102
General Versus Special Measures of Need.... 102
Measuring Need for Welfare Aids.... 104
Measuring Need for Public Health.... 107
Measuring Need for Education.... 110
Statutory Versus Administrative Measurement of Need.... 113

Chapter IX. Measurement of Fiscal Ability.... 114
History of Alternatives.... 114
Income Payments to Individuals.... 116
Supernumerary Income.... 123
General Versus Special Measures of Fiscal Ability.... 126

Page

Chapter X. Public Assistance Equalization Formulas.......... 128
- An Equalization Matching Formula............ 129
- Proof of "Full Equalization," Assuming Equal Effort.. 134
- Other Public Assistance Formula Proposals... 136
- Equalization-Matching Formula Best Choice... 147

Chapter XI. Public Health Equalization Formulas.............. 148
- The General Public Health Grants............ 149
- Allotments Based on Population and Financial Need.. 151
- Allotments Based on Public Health Expenditures.. 153
- Comparison of the General Health Alternatives in Summary.................................. 155
- Grants for Special Public Health Programs... 157

Chapter XII. Education Equalization Formulas................ 160
- Open-end Federal Aid........................ 161
- Closed or Limited Amounts of Federal Aid.... 164

Chapter XIII. Public Construction Federal Aids............... 172
- Health and Education Construction Grants.... 173
- Other Public Works Grants................... 177

Postcript.. 179

Appendix A. Special Problems of Intrastate Equalization...... 181
- State Measurement of Need in Local Areas.... 181
- Equalization Apportionments, Given No Local Financial Participation..................... 186
- Special Problems of Local Financial Participation...................................... 187
- State Measurement of Local Fiscal Ability... 189
- Equalization Formulas Embodying Measures of Need and Ability.......................... 192
- Administration of the Intrastate Equalization Plan.................................... 204
- Relating Intrastate and Interstate Equalization.. 206

Appendix B. Chronological Development of Federal Grants Legislation, By Function..................... 207

Bibliography.. 214

TABLES AND CHARTS

Table Page

1. Number of States receiving grants for Social Security Act programs by the end of the fiscal year.................................... 7
2. Federal grants-in-aid to States...................... 8
3. Public assistance: Payments and recipients, by program, fiscal years 1941-46................. 9
4. Federal grants to States, by purpose and State, fiscal year 1945-46............................ 11
5. Estimated amount of grants by major allocation bases and matching requirements, 1946-47...... 57
6. Population density and Federal grants per square mile.................................... 62
7. Federal grants as percent of State-local expenditures for certain functions, by State, 1941-42.......................... 63
8. Comparison of average effort for various functions by States in different income groups, 1941-42................................... 66
9. Federal grants to States, per capita, by purpose and State, fiscal year 1945-46........ 68
10. Per capita Federal grants to States, by function, fiscal year 1941-42........................ 70
11. Federal grants in fiscal year 1945-46 in relation to income payments, by State................. 71
12. Effort expended in financing old-age assistance and burden required to raise State average monthly payments to $35...................... 85
13. Total Federal grants for public assistance per capita fiscal years 1936-46 inclusive......... 87
14. Relationship of school age population to total population, by State, 1940.................... 111
15. Range in State per capita income, 1929-45.......... 117
16. Per capita income payment and alternative indexes of capacity, by State, 1940.................. 121
17. Federal grant percentages based on specified indexes of capacity, 1940..................... 122
18. State per capita income payments, before and after adjustment for Federal taxes, 1945...... 124
19. Percentages derived from basic equalization formula assuming alternative "pivot-points"... 132
20. Illustration of equalization possible in average monthly old-age assistance payments through use of "full equalization" formula, under certain standard assumptions................. 135
21. Federal aid percentages under various equalization matching formulas, by State.................. 138

Table Page

22. Percentage of Federal participation in public assistance payments, by program and by State, October-December 1946.................. 142
23. Analysis of Federal aid and minimum State contribution for medical care services under S. 545, part B....................................... 146
24. Analysis of allotment of $100 million Federal aid based on 1945 civilian population, with full equalization matching.......................... 150
25. Analysis of allotment of $100 million Federal aid based on 1945 civilian population weighted by the reciprocal of per capita income, with full equalization matching....... 152
26. Illustration of full equalization allotment and matching of $100 million Federal aid, based on population multiplied by Federal equalization matching percentage.............. 154
27. Analysis of use of State-local expenditures for public health (1945) in allocation of $100 million Federal aid with equalization matching ratios................................. 156
28. Illustration of proposal for open-end aid to education with equalization matching using 10 percent Federal aid as pivot-point....................................... 163
29. Comparative cost of Federal aid to education under the formula in original S. 472 as estimated in 1946 and in 1947 with different data, by State......................... 166
29A. Comparison of Federal aid to education under S. 472 as reported, and under alternative terms, by State................................. 168
30. A comparison of Senate and House requirements for State-local-private matching of Federal hospital construction allotments provided under S. 191, showing amounts as percent of income payments in the State, and per capita amounts............................ 176
31. Illustration of operation of intrastate equalization plan 1 in a hypothetical State........... 196
32. Illustration of operation of intrastate equalization plan 2 in a hypothetical State, assuming that property assessments are the sole measure of local fiscal ability.............. 198

Table Page

33. Illustration of operation of intrastate equalization plan 2 in a hypothetical State, assuming that fiscal-ability index includes property assessments and shared taxes.... 200
34. Illustration of operation of intrastate equalization plan 3 in a hypothetical State, with local-matching percentages averaging 9 percent.... 203

Chart

1. Relationship between per capita Federal tax incidence and per capita Federal grants, by State.... 60
2. Income grouping of States based on 1943-45 average per capita income.... 64
3. Total per capita Federal grants in relation to per capita income.... 73
4. State and local government operating expenditures as a percent of income payments, and amounts per capita, by State.... 76
5. State and local expenditures in 1945 for general assistance and for the three special types of public assistance, as a percent of income payments, by State.... 78
6. Per capita Federal grants for public assistance in relation to per capita income.... 80
7. Per capita income and average monthly payment per recipient of old-age assistance, by State.... 81
8. Recipient rates for aid to dependent children and old-age assistance, by State, June 1945.... 83
9. State funds per program unit, with uniform effort.... 95
10. Federal and State funds per program unit, uniform effort and equal matching.... 96
11. Federal and State funds per program unit, when Federal aid is a uniform amount per program unit, and State funds represent uniform effort.... 97
12. Federal and State funds per program unit, full equalization.... 98
13. Federal and State funds per program unit, under three alternatives.... 99

INTRODUCTION

Federal grants-in-aid to States are as old as the Nation. From its first year the Federal Government has made grants to encourage or to help finance certain public functions, now including welfare, health, education, transportation facilities, and the conservation and development of natural resources. In recent years the volume of Federal grants has grown rapidly, although somewhat haphazardly, until now every State and local unit of government has a substantial interest in their operations. Federal, State, and local legislators and officials recurrently call for study and appraisal of the existing situation, hoping thus to bring a measure of order out of the present complex aid programs.

Grants-in-aid comprise but one segment of the whole field of intergovernmental financial relations. Quantitatively, however, they are the most important segment, and potentially they are the most flexible in the variety of purposes which may be served. Federal grants-in-aid have helped to improve the quantity and quality of public health and welfare services within States and localities. They have assisted in creation of the excellent highway system of this country. The excellence of our land-grant colleges and universities is partly traceable to grants-in-aid. The effective operation of unemployment insurance laws in every State is still another successful use of grants.

None of these governmental services is everywhere adequate, and significant variations in the effectiveness of one or another program occur from place to place. If grants have been adopted to assure a national minimum of certain public services, the goal has at best been imperfectly achieved, in substantial part because of the allocation and matching provisions utilized, although in part because of the restrictions on total funds available and on uses to which aids may be put.

There is a growing realization that, if Federal grants are more equitably to meet the needs of the various receiving jurisdictions, not only these needs, but also the ability of the State and local governments to support the aided services, must be considered in the distribution of grants. Equity requires that the Federal Government be concerned that its laws operate in fact with a high degree of uniformity among States. Similarly, it requires that both Federal and State Governments work to assure that Federal-State programs operate with a high degree of uniformity among localities within States. In addition, central governments should also have some regard for the tax burden placed on receiving units by the existence of grants-in-aid; they should allocate aids so that a reasonable minimum of governmental services can be provided in every jurisdiction without placing undue tax burdens on some.

In discussing the principle of equalization as applied to the allocation of grants-in-aid, this study deals with only two main facets of equalization, namely, equalization of the level of the programs or services for which aid is available and equalization of the burden of State and local support of that level. The study does not discuss certain broader types of equalization, such as equalization of income, or equalization of governmental services for which central governments do not see fit to aid smaller units.

The purpose of this study is to examine the equitableness among States of the present distribution of Federal grants, and to outline alternative steps which, if taken, would secure greater equalization (in the sense herein defined) in the allocation of grants-in-aid.

In scope, the only satisfactory context for appraisal of the present distribution of welfare grants is a general examination of all grants. Therefore, the first two sections, background and critical analysis, deal with all Federal grants to States. The scope of the subsequent section, containing recommendations, is largely limited, however, to grants that fall within the welfare and related fields--broadly, social security, health, and education. Primary attention is focused on the largest of the current grant programs.

The background chapters (I-IV) deal successively with the fiscal importance of Federal aids, various reasons for the use of Federal aids, the philosophy of Federal aid and of equalization underlying this study, and the historical development of allocation and matching provisions in Federal grant-in-aid legislation.

In the second part (chapters V and VI), the present methods of distributing grants are evaluated critically to determine their equitableness; and some of the general problems arising in the design of grant formulas are dealt with.

The final part (chapters VII through XIV) deals with the major recommendations growing out of the preceding analysis, with special regard to Federal Security Agency grants. Although interstate equalization of the burden of providing substantially similar levels of service is the primary focus of the study, many of the purposes of equitable distribution of grants will not be realized unless the States devise and adopt equitable systems of distributing grants to local units. Therefore, an appendix relates some of the findings of earlier chapters to the problem of intrastate equalization.

The definition of Federal grants-in-aid used in this study grows out of the purpose and scope of the study, and is limited to payments in cash (and distributions in kind, such as books and apparatus distributed by the American Printing House for the Blind, and foodstuffs for school lunches) from the Federal Government to State governments, including their appointed agents or constituent departments. This definition excludes a number of Federal expenditures for other purposes that are quite similar in some respects to the "regular" grants-in-aid; excluded, for example, are payments in lieu of taxes, grants to local housing authorities, Lanham Act grants to war-affected areas, Federal expenditures for forest roads and trails, and Federal payments directly to individuals within States as part of soil conservation work, dependency benefits, and the like. It also excludes direct Federal expenditures within States for purposes which may relieve the States and their subdivisions from what would otherwise be their financial responsibility; as, for example, operation of State employment services by the War Manpower Commission during the war, National Guard and assistance to enemy aliens.

Any definition must necessarily be somewhat arbitrary. Whatever the criteria selected, there will be some borderline cases that have many of the qualifications set for inclusion but fail to meet one specification or another. For example, the definition used does not include the school lunch program as it existed prior to 1946, because until then Federal aid went directly to local units. On the other hand, the definition includes Federal aid for airport construction--even though some of this aid may go, under the 1944 act, directly from the Federal Government to local units--because most of the aid is to be channeled through State governments. Each study of Federal grants tends to define them in a manner best adapted to the purposes of the particular study.1/ The definition used here seems best suited to a study of the allocation of Federal aids among States.

1/ Each of the following studies has used a different definition of Federal grants: Grants-in-Aid and Other Federal Expenditures within the States, by the Council of State Governments (1945); Federal and State Aid, by the United States Bureau of the Census (1942); and Federal, State and Local Government Fiscal Relations, by the Treasury Committee on Intergovernmental Fiscal Relations. (1943)

CHAPTER I

HISTORICAL SURVEY OF THE DEVELOPMENT OF FEDERAL GRANTS

The tremendous growth of Federal grants during the past 15 years in the face of the twin emergencies of depression and of war may tend to conceal the fact that Federal aids to States 1/ are older than the Constitution. The present Federal aids are but a logical outgrowth of actions taken during the past 170 years, and especially of the last 60 years. During its first century the National Government had made many land grants to States, but beginning in 1887 it adopted annually recurring money grants to States.2/

It is necessary to review that historical development in order to understand the present situation, and to appreciate why grants-in-aid have been favored in solving problems of intergovernmental financing of public services in the United States.

Earliest Grants Favored Educational Purposes

It is significant that, during the first 125 years of this country's development, all but two of the Federal grants to States were for educational purposes,3/ most of them in the form of land grants. The

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1/ See Appendix B for detail as to the development of grant legislation. Throughout this study, the term "States" includes not only the 48 States but also, where included by Federal grant legislation, the District of Columbia, Hawaii, Alaska, Puerto Rico, and the Virgin Islands; for analytical purposes, however, it has usually been necessary to include only the 48 States and the District of Columbia.

2/ For agricultural experiment stations. Annual grants in kind began 8 years earlier, with the act of 1879 for books and apparatus for the education of the blind.

3/ The first exception was the unique distribution in 1836 of the surplus in the Federal Treasury, designated as a deposit in State treasuries but described by Senator Burton as "in name, a deposit, in form, a loan, in essence and design, a distribution" (quoted in Hibbard, B. H., A History of the Public Land Policies, 1924, p. 184). The second exception was the introduction of Federal aid for State and Territorial Homes for Disabled Soldiers and Sailors, in 1888. Congress had voted at least one other exception, in a bill to grant 10 million acres of public lands to the States for aid in the care of the indigent insane; the bill was vetoed by President Pierce on the ground that this function was outside the jurisdiction of the Federal Government. (Congressional Globe, May 3, 1854, pp. 1061-1063.) The third grant for other than educational purposes occurred 126 years after the Northwest Ordinance, when the Weeks Act of 1911, providing aid in fighting forest fires, was passed. All the other present types of Federal grants have begun in the past 35 years.

famous provisions of the Northwest Ordinance of 1785 that set aside Section 16 of every township for the "maintenance of public schools within the said townships" suggest that the founding fathers were interested in assuring that every child in the country would have educational opportunities, and that the weakest, youngest local government would have the resources with which to start a school system.

The gospel of democracy and equalitarianism reinforced a still older motive in this case. Having come to these shores for religious freedom, the earliest settlers wanted their children to be able to read the Bible that they too might study the Scriptures. The purposes of religious instruction, the desire that all should have opportunity to advance through education, and the very necessity for self-sufficiency in a new and sometimes hostile world all led to the creation of a full and free educational system. But the local settlements starting in the wilderness had meager fiscal resources. Cash crop income in farm areas was small. The public lands had largely been surrendered to the central government, and it was almost embarrassed by the size of the bounty it controlled and by the productivity of the customs duties. What more natural, then, than that the central government should give what it had most of, land, to aid the local units to perform a service most people sought to have performed?

In later years, other motives entered into the decisions to make educational grants-in-aid. The Civil War was a powerful stimulant to the idea that the Union needed greater national security, including more scientists and engineers, trained farmers to produce food for the Army, and leaders with some knowledge of military science and tactics. The Morrill Act of 1862 established land grants for colleges of agriculture and the mechanic arts, with the proviso that the colleges must also offer instruction in military science.

The sense of interdependence led the way to action, yet recognition of the role of the States made the Federal action take the form of grants-in-aid, not direct Federal operation of such schools.4/

Early Federal Grants Also Served Transportation and Communication 5/

From the earliest days of the Republic, the Federal Government has had the responsibility for regulating interstate and foreign commerce, as

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4/ Several Presidents have desired to see a national university established, but Congress has never seemed to favor the idea, except for Negroes and functionally handicapped persons. In 1787, however, the Continental Congress did give each State two townships for university purposes.

5/ See U.S. Office of Federal Coordinator of Transportation, Public Aids to Transportation, 1938-40, for a comprehensive treatment of all public aids in this broad field, their effects on the development of transportation, and the problems created by them. See also National Resources Planning Board, Transportation and National Policy and The Future of Transportation, May and September 1942, respectively.

well as commerce with the Indian tribes. In the exercise of that power, Congress has voted funds and public lands to improve rivers and harbors, to build canals, erect and maintain lighthouses, and generally promote water transportation. It established the Coast Guard and gave the Public Health Service responsibilities in connection with maritime health problems.

With the advent of the steam engine, Congress came to recognize the importance of the railroad as a means of overland transportation and made generous grants of land (totaling almost one-tenth of the area of the continental United States) to private companies in return for a contractual promise that they would build lines through the territory in which the public lands lay and would connect certain cities and regions.6/

Congress also had control over post offices and post roads. To further such communication and transportation, it appropriated money to support post roads and earmarked land grants to various States for specific canal and road projects, such as the Cumberland Road, which helped to open Ohio, Indiana, and Illinois 7/ and, through them, the Middle West. But, in time, the States and local governments came to assume more responsibility for public roads, and Congress gave the rights-of-way to the States in which the Federal roads were located.

Not until many years later, in 1916, did Congress again turn to highway transportation, for by then it was clear that the automobile and truck were here to stay and that such means of interstate communication would be increasingly important. The growing national interest led Congress to enact a substantial program of highway grants. Indeed, the modern era of Federal grants-in-aid to States may be said to have begun with the passage of the Federal Aid Road Act of 1916 for the construction of rural post roads.8/

The Modern Grant Era

The Federal Aid Road Act provided the beginning of the first substantial amounts of Federal aid under any one program. A number of other small grant programs had their inception at about the same time, including cooperative work in the prevention of forest fires, marine schools aid,

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6/ U.S. Office of Federal Coordinator of Transportation, op. cit., vol. 1, p. V. Not all these aids would be included under the definition of grants to States used in this study.

7/ See Young, Jeremiah S., A Political and Constitutional Study of the Cumberland Road, 1908.

8/ Other authors often begin with the Morrill Acts, because from these eventually flowed annual, though small, Federal grants, beginning in 1890, 28 years after the original Morrill Act. The 1916 Federal Aid Road Act, however, was the first major innovation, both as to function and amount of money.

agricultural extension work, vocational education, venereal disease control, maternal and child health aid, and vocational rehabilitation.

Also, a number of existing programs received increases in the amounts of Federal aid during the years 1914 to 1930. Among these were agricultural experiment stations, land-grant colleges, education of the blind, and State soldiers' homes.

Effect of the Depression on Grants

The great advance in the use of Federal grants-in-aid came during the depression of the 1930's. A somewhat hybrid form was among the first to emerge, in title III of the Emergency Relief and Construction Act. In the face of mounting unemployment, this act authorized the Reconstruction Finance Corporation to offer loans totaling $1.5 billion to States and cities to assist them in constructing self-liquidating public works. Very few loans were made to public units under this act because of the self-liquidating requirement and the high interest rates.

During its first 10 years the Reconstruction Finance Corporation bought only $752 million of State and municipal bonds, as follows:[9]

1932.....	$ 16	million	1937.....	$ 58	million
1933.....	206	"	1938.....	105	"
1934.....	61	"	1939.....	39	"
1935.....	58	"	1940.....	12	"
1936.....	38	"	1941.....	159	"

In July 1932 the Reconstruction Finance Corporation was also given power to make relief loans of $300 million to States, and this amount was disbursed during the same year. Less than $20 million of these relief loans had been repaid by 1938, when the loans were canceled by act of Congress. Thus, the loans made 6 years earlier became, in effect, grants.

In 1933, Congress chose to use grants to provide assistance to States in operating relief programs and to encourage State-local public works construction. Hardship and suffering caused by unemployment were mentioned in the relief and work relief grant provisions contained in the Federal Emergency Relief Administration Act of May 12, 1933. Similarly, aid in financing "public works projects to relieve unemployment" was provided in title II of the National Industrial Recovery Act of June 16, 1933.

From year to year these programs and their successors were extended because of continuing unemployment and the fiscal stringency of many State and local governments. Meanwhile, the President had appointed a Cabinet Committee on Economic Security to study and recommend permanent legislative safeguards "against misfortunes which cannot be wholly eliminated in this man-made world of ours."

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[9] The Bond Buyer (quoted in Federal, State, and Local Government Fiscal Relations, Senate Document No. 69, 78th Congress, 1st Session, p. 392).

In its 50-page report to the President on January 15, 1935,10/ the Committee began by saying that the need for such security "is tragically apparent at this time, when 18 million people, including children and aged, are dependent upon emergency relief for their subsistence and approximately 10 million workers have no employment other than relief work. Many millions more have lost their entire savings, and there has occurred a very great decrease in earnings . . .

"As progress is made toward recovery, this insecurity will be lessened, but . . . even in the 'normal times' of the prosperous twenties a large part of our population had little security . . . Many people lived in straitened circumstances at the height of prosperity . . . Throughout the twenties, the number of people dependent upon private and public charity steadily increased." After briefly detailing the hazards and misfortunes of unemployment, accidents, illness, invalidity, orphanage, and dependency of both children and needy aged, the Committee concludes its introduction with the declaration:

"The one almost all-embracing measure of security is an assured income. . .

"A piecemeal approach is dictated by practical considerations, but the broad objectives should never be forgotten. Whatever measures are deemed immediately expedient should be so designed that they can be embodied in the complete program which we must have ere long."

In at least seven of the major recommendations of the Committee (in its "piecemeal approach"), grants-in-aid are advocated or supported. The major recommendations were (seriatim):

1. Employment assurance--"the stimulation of private employment and the provision of public employment for those able-bodied workers whom industry cannot employ at a given time."

2. Unemployment insurance--"a front line of defense."

3. Old-age security--"as complementary measures noncontributory old-age pensions, compulsory contributory annuities, and voluntary contributory annuities, all to be applicable on retirement at age 65 or over."

10/ Report to the President of the Committee on Economic Security, U.S. Government Printing Office, 1935.

4. Security for children--Federal grants for children's aid (mothers' pensions) and Federal assistance to States for child welfare services, child and maternal health services, and care of crippled and handicapped children.

5. A Nation-wide preventive public health program--Federal financial and technical aid to State and local health departments. "The second major step we believe to be the application of the principles of insurance to this problem."

6. Residual relief--if the preceding measures are adopted, "the residual relief problem will have diminished to a point where it will be possible to return primary responsibility . . . to the State and local governments. To prevent such a step from resulting in less humane and less intelligent treatment of unfortunate fellow citizens, we strongly recommend that the States substitute for their ancient, outmoded poor laws modernized public assistance laws, and replace their traditional poor-law administrations by unified and efficient State and local public welfare departments . . ."

7. Administration--"It is recommended that all social welfare activities of the Federal Government be coordinated and systematized."

8. Accident compensation--uniformity and higher standards of State safety and accident compensation laws and their administration.

9. Employment Service--expanded and improved . . . "No fundamental change in the relation of the Federal and State Governments to the employment offices is deemed necessary . . ."

10. Education, training, vocational guidance, and rehabilitation services--"of major importance in obtaining economic security for the individual and the Nation . . . Federal participation . . . is most desirable."

The report concludes that these measures "will not give complete economic security" but "the initial steps . . . should be taken now." Finally, "this program will involve considerable cost, but this is small as compared with the enormous cost of insecurity. The measures we suggest should result in the long run in material reduction in the cost to society of destitution and dependency . . . The program will promote social and industrial stability and will operate to enlarge and make steady a widely diffused purchasing power upon which depends the high American standard of living and the internal market for our mass production, industry, and agriculture."11/

Most of the recommendations of the Committee have been adopted.

11/ Ibid., p. 50.

(See table 1.) Federal aid for public works (employment assurance) is, however, still limited to public works planning, and the construction of highways, airports, hospitals, and health centers. Nor is there yet a Nation-wide system of public health insurance, but private groups have made beginnings. Gaps which the Committee noted in a total program of economic security are smaller now than then, but many still remain. As these, too, are closed, Federal grants-in-aid will undoubtedly help to close them.

Table 1.--Number of States receiving grants for Social Security Act programs by the end of the fiscal year 1/

	1936	1937	1938	1940	1942	1944	1946
Old-age assistance.........	34	42	50	51	51	51	51
Aid to dependent children..	19	29	42	43	47	49	2/ 50
Aid to blind...............	22	31	42	44	44	47	2/ 48
Unemployment insurance.....	11	36	51	51	51	51	51
Maternal and child health..	48	51	51	52	52	52	52
Crippled children..........	35	45	50	51	52	52	52
Child welfare..............	33	43	50	52	52	52	52
Public health..............	51	51	51	53	53	53	3/ 53
Vocational rehabilitation..	46	48	47	50	51	51	3/ 51

1/ Under the original act these grants were available to 51 jurisdictions: the 48 States, the District of Columbia, Alaska, and Hawaii. The 1939 amendments extended the Children's Bureau and public health programs to Puerto Rico, and the 1946 amendments extended Children's Bureau programs to the Virgin Islands. In 1939, public health grants were extended to the Virgin Islands.

2/ Three States administer aid to the blind without Federal aid, and one State aids dependent children without Federal aid.

3/ The Public Health Service Act of 1944 took the public health title out of the Social Security Act. The LaFollette-Barden Act of 1943 supplanted the vocational rehabilitation section of the Social Security Act.

The depression had a tremendous impact on grants-in-aid. It is largely responsible for their present bulk, and for much of their variety. Grants were found to be an extremely useful tool in the promotion of economic security. From $2.8 million in 1900, grants increased to more than $2 billion in the fiscal year 1934-35, when Federal aid for emergency highway, relief, and public works programs reached its peak. Though the amounts declined thereafter, the grants were still as much as $758 million in 1945-46. (See table 2.)

Table 2.--Federal grants-in-aid to States 1/
/in millions/

Function	Fiscal year ending June 30--					
	1900	1920	1930	1935	1940	1946
Total........	$2.8	$34.0	$100.5	2/ $2,196.6	$577.5	$757.9
Social security and related programs..	.9	2.9	1.3	2.8	359.2	611.5
Public assistance	---	---	---	---	271.1	421.2
Employment security.......	---	---	---	1.3	61.7	55.7
Health and welfare........	.9	2.9	1.3	1.5	26.4	134.6
Education..........	1.2	4.8	10.1	12.7	24.7	34.3
Public roads........	---	20.3	75.9	274.7	164.5	74.5
Natural resources...	.8	6.0	13.2	14.5	29.1	37.5
Emergency relief and public works..	---	---	---	1,891.9	---	---

1/ From the annual reports of the Secretary of the Treasury. See footnotes, table 4, for details on classification.
2/ Regular grants, excluding those for emergency relief and public works, amounted to $304.7 million.

Grants-in-Aid During World War II

The war brought about redirection of certain grant-in-aid programs and also the creation of new ones adapted to wartime purposes. For example, Federal grants-in-aid were used to train war workers, to maintain an adequate supply and distribution of farm labor, and to give "emergency" maternity and infant care to wives and families of servicemen. Many existing grant-in-aid programs were given a war orientation. The bulk of public road grants in most of the war years went for access roads

Table 3.--Public assistance: Payments and recipients, by program, fiscal years 1941-46

Year	Total payments to recipients (in thousands) 1/	Federal aid for payments to recipients (in thousands) 1/	Recipients (in thousands) 2/		Average monthly payment 2/	
	Old-age assistance					
1940-41....	$505,053	$251,254	2,070		$20.26	
1941-42....	568,679	282,644	2,238		21.27	
1942-43....	616,558	305,743	2,230		23.37	
1943-44....	679,332	326,847	2,149		26.66	
1944-45....	701,951	325,453	2,066		28.42	
1945-46....	761,587	354,983	2,056		30.82	
	Aid to dependent children					
			(Families)	(Children)	(Per family)	(Per child)
1940-41....	$145,955	$57,528	372	895	$32.39	$13.59
1941-42....	157,409	62,768	391	944	33.63	13.90
1942-43....	149,961	58,627	349	851	36.27	14.68
1943-44....	135,897	50,269	273	678	41.51	16.70
1944-45....	138,532	48,520	254	640	45.55	18.04
1945-46....	173,118	54,869	274	702	52.05	20.55
	Aid to the blind					
1940-41....	$22,271	$6,483	73		$25.37	
1941-42....	23,770	7,093	77		25.81	
1942-43....	24,888	7,721	79		26.54	
1943-44....	25,215	8,729	76		27.95	
1944-45....	25,331	9,350	72		29.31	
1945-46....	28,517	9,658	71		33.52	

1/ From Source of Funds processed releases of the Bureau of Public Assistance.

2/ Represents recipients and average payments for December falling within the fiscal year. From the 1944 Social Security Yearbook and the Social Security Bulletin, February 1946.

to military and defense establishments, for the strategic highway network, and for surveys and plans classified as war activities.

With one notable exception, the Federal Government did not take over functions to assure wartime orientation of its grant programs. It did "federalize" the public employment services under the War Manpower Commission, 12/ but these services were returned to the States on November 15, 1946, under provisions of the Labor-Federal Security Agency Appropriation Act for the fiscal year 1947.

The almost steady upward trend (excluding the temporary programs of the depression) of Federal grants to States was broken during the war. After reaching a peak for this period of $828 million in 1942-43, total grants then declined to $825 million in 1943-44 and $730 million in 1944-45 (table 4). A postwar upturn to $758 million was noted in 1945-46.

While the war was accompanied by a reduction in the size of Federal grants for certain functions, notably highway construction and employment security administration, the amounts for other functions continued their steady rise. The reasons for the rise in public assistance expenditures each succeeding year throughout the war 13/ were availability of greater State and local revenues, an attempt to keep assistance payments in line with the rise in the cost of living, and the fact that the program was still in the developmental stage—perhaps if not as to numbers, at least as to the extent to which it met the needs known to exist. Thus, even though there was some decline in numbers on the rolls, the average payments continued to climb. The data in table 3 show the effect of the war years on the public assistance programs. Table 4 shows total Federal grants to States for social security and related purposes, 1937-46, and by State, 1945-46.

12/ The National Guard was also taken over, but the Guard is not a grant program, as here defined.

13/ Table 4 shows Federal aid to States by major function in the fiscal year 1945-46. These figures are on a checks-issued basis. Perhaps a more meaningful basis for appraising annual changes in such data is the amount of grants certified by the grant-making agency. Throughout this document, analysis is generally based on checks-issued data because they are more readily available from one consistent source—the Treasury Department. These data contain distortions, however, due to discrepancies between the time of issuance of checks and the period to which they pertain. For example, it appears that, on a checks-issued basis, grants for assistance declined in the fiscal year 1944-45 (to $401 million from $429 million in 1943-44). On a grants-certified basis, on the other hand, they rose constantly from $396 million in 1942-43, $405 million in 1943-44 and $410 million in 1944-45 to $439 million in 1945-46. Similarly, on a grants-certified basis, Federal grants for unemployment insurance administration (employment security in table 4) were $31.9 million in 1943-44, $30.0 million in 1944-45, and $57.9 million in 1945-46.

Table 4.--Federal grants to States, by purpose and State, fiscal year 1945-46 1/

[In thousands]

State	Total, all grants	Social security and related purposes				Education 5/	Public roads	Development and conservation of natural resources 6/
		Total	Assistance payments and adminis- tration 2/	Employment security adminis- tration 3/	Health and welfare services 4/			
1936-37	$550,462	$171,266	$143,934	$11,484	$15,848	$13,900	$340,718	$24,578
1937-38	578,531	280,997	216,074	45,939	18,984	24,249	247,024	26,261
1938-39	573,129	328,402	246,898	62,858	18,646	24,838	191,573	28,316
1939-40	577,539	359,242	271,131	61,680	26,431	24,708	164,517	29,072
1940-41	715,349	426,986	329,845	66,195	30,946	87,299	171,042	30,022
1941-42	779,198	464,710	374,568	55,544	34,598	125,515	157,911	31,062
1942-43	828,064	472,091	395,449	39,480	37,162	151,188	173,659	31,126
1943-44	7/ 825,093	533,822	429,458	35,294	69,070	112,735	7/ 144,120	34,416
1944-45	729,849	521,589	401,400	34,419	85,770	83,763	87,429	37,068
1945-46	757,874	611,501	421,196	55,726	134,580	34,319	74,529	37,526
Alabama	13,487	8,586	4,267	597	3,722	785	2,863	1,254
Alaska	772	613	238	94	281	65	8	86
Arizona	5,252	3,624	2,609	228	786	243	1,108	278
Arkansas	9,143	6,296	3,353	480	2,464	800	1,006	1,041
California	62,549	53,442	38,990	6,272	8,179	1,755	5,809	1,543
Colorado	12,576	10,835	9,441	246	1,147	518	772	450
Connecticut	7,535	6,408	3,641	1,060	1,707	444	381	301
Delaware	1,562	894	219	174	501	214	272	182
District of Columbia	8/ 1,962	1,870	725	306	839	51	42	---
Florida	15,384	13,074	9,730	490	2,853	510	1,097	702
Georgia	16,799	11,750	5,860	803	5,088	1,024	2,755	1,270
Hawaii	3,509	1,131	369	82	679	181	1,938	258
Idaho	4,676	2,891	2,022	185	684	330	968	487
Illinois	45,090	41,634	31,321	3,789	6,524	1,335	1,263	858
Indiana	17,713	15,016	10,520	1,355	3,141	714	1,185	798
Iowa	13,355	11,751	9,387	268	2,096	556	236	813
Kansas	9,724	7,817	5,728	524	1,565	461	808	639
Kentucky	10,550	7,642	4,037	469	3,135	777	1,075	1,056
Louisiana	14,387	10,787	6,714	764	3,309	806	1,860	933
Maine	5,176	4,170	3,069	294	808	350	264	393
Maryland	7,709	5,474	2,916	836	1,722	492	1,305	438
Massachusetts	25,684	23,886	18,525	2,058	3,303	657	838	304
Michigan	33,942	29,482	20,297	4,064	5,121	1,074	2,200	1,186
Minnesota	16,933	14,234	10,755	677	2,803	661	1,014	1,024
Mississippi	8,718	6,370	3,173	303	2,894	811	340	1,197
Missouri	27,548	23,973	19,735	1,160	3,077	883	1,677	1,015
Montana	5,195	3,095	2,369	185	541	313	1,378	409
Nebraska	9,034	6,096	4,815	168	1,113	437	1,946	555
Nevada	2,106	815	468	148	199	171	923	197
New Hampshire	2,889	2,084	1,393	222	469	213	342	250
New Jersey	12,413	10,341	4,775	2,639	2,927	616	1,038	417
New Mexico	5,324	2,496	1,623	139	734	224	2,266	337
New York	52,527	46,781	27,890	8,795	10,096	2,225	2,584	937
North Carolina	13,514	9,643	3,922	682	5,039	1,041	1,359	1,471
North Dakota	5,220	2,446	1,795	88	563	523	1,810	442
Ohio	37,496	33,082	24,377	3,328	5,378	1,190	2,200	1,023
Oklahoma	29,110	23,909	20,658	504	2,745	732	3,587	882
Oregon	10,296	7,004	5,006	723	1,275	446	1,690	1,156
Pennsylvania	34,820	30,181	21,635	3,909	4,637	1,794	1,612	1,233
Puerto Rico	3,493	2,424	---	---	2,424	382	233	454
Rhode Island	3,391	2,938	1,880	399	659	184	105	164
South Carolina	10,008	6,837	2,917	306	3,614	767	1,407	996
South Dakota	3,936	2,813	2,161	68	584	310	376	436
Tennessee	15,300	10,212	5,706	733	3,774	823	3,172	1,092
Texas	44,849	35,646	26,518	1,403	7,725	1,951	5,389	1,863
Utah	5,848	4,378	3,249	267	861	288	855	327
Vermont	2,234	1,524	894	149	481	226	216	268
Virgin Islands	57	57	---	---	57	---	---	---
Virginia	8,885	5,684	2,231	548	2,905	793	1,406	1,003
Washington	21,194	17,207	13,635	1,314	2,258	661	2,230	1,096
West Virginia	8,798	5,894	3,114	571	2,209	442	1,738	725
Wisconsin	15,269	13,050	9,742	759	2,549	813	397	1,009
Wyoming	2,929	1,212	778	101	333	257	1,183	278

1/ Grants data, on a checks-issued basis, are from Annual Report of the Secretary of the Treasury on the State of the Finances for Fiscal Year Ended June 30, 1946, table 103, and other Treasury reports.

2/ Payments to individuals and administrative expenditures for old-age assistance, aid to dependent children, and aid to the blind.

3/ Unemployment insurance administration, and employment service under the Wagner-Peyser Act, January 1937-December 1941.

4/ Maternal and child health and welfare services, public health, venereal disease and tuberculosis control, vocational rehabilitation, State and Territorial homes for disabled soldiers and sailors, emergency maternity and infant care, community war services day care (for 1942-43 only), and the school lunch program, which is included for the first time for 1945-46.

5/ Education of the blind, agriculture and mechanic arts colleges, marine schools, vocational education, defense training, and services for improving the supply and distribution of farm labor.

6/ Forestry, wildlife restoration, agricultural experiment stations, and agricultural extension work.

7/ Includes $559,000 for Canal Zone for public roads.

8/ Excludes annual lump-sum payments by the Federal Government to defray part of local expenses for use of District as seat of government.

Grants for education, in contrast, fluctuated sharply, mainly because of the adoption of a program of training defense workers. From $25 million in 1939-40 they rose to a peak of $151 million in 1942-43 and then subsequently declined to $84 million in 1944-45 and $34 million in 1945-46.

The impact of Federal grants upon State and local budgets has become significant. In 1941-42, 14/ total grants to States represented about 9.8 percent of all State and local government expenditures.15/ In individual States, grants provided as much as 21.9 percent of the total in Nevada and in no State did they provide less than 4.6 percent (New York). More recently, considering only State governmental expenditures, Federal aid to States during 1945-46 provided an average of 26.7 percent of expenditures. Taking individual functions alone, Federal aid for public assistance represented 46.6 percent of the payments for old-age assistance, 31.7 percent for aid to dependent children, and 33.9 percent for aid to the blind, on the average, during 1945-46.16/ During that year, Federal aid for highways was 11.9 percent of State operating and capital expenditures, and, for conservation of natural resources, 22.6 percent. In the field of public health, it provided approximately 18 percent of the expenditures reported by State and local health departments during the fiscal year 1945. Even in education, the Federal Government provided about 7 percent of the total spent for publicly supported schools on the college and professional level, and 14 percent of the total spent for secondary schools in 1941-42.17/ No Federal aid is available for elementary schools.

14/ The decennial Census of Government in 1942 is the most nearly complete recent summary of total State and local expenditures by function.

15/ Unless otherwise specified, expenditures here mean operating expenditures plus capital outlays for highways.

16/ These percentages will be larger in 1947, however, because the 1946 amendments to the Social Security Act increased, for the period October 1946 through December 1947, the relative amount available from Federal funds; the 1947 percentages are estimates at 34 percent for old-age assistance, 40 percent for aid to dependent children, and 52 percent for aid to the blind.

17/ U.S. Office of Education, Statistical Summary of Education, 1941-42, pp. 32-38. These percentages are higher than usual; Federal aid in 1941-42 included $15.9 million for defense training on the college level and $99.7 million for defense training in secondary schools. Regular Federal aid for vocational education in secondary schools represented about 35 percent, however, of the total spent for this purpose.

Grants-in-aid in the Postwar Period

Special postwar Federal aids have been voted for four purposes: (1) $1.5 billion for a 3-year period for highway construction; (2) $30 million for advances to State and local governments for the planning of public works,18/ (3) $500 million for the construction over the next 5 years of public airports; and (4) $378 million for a 5-year program for the planning and construction of hospitals and public health centers. The National School Lunch Act of 1946 gave permanent legislative status to the depression-born school lunch program; the initial 1947 appropriation amounted to $75 million.

The Seventy-ninth Congress also gave additional financial support to six other well established grant programs. Public health aid was increased by $10 million and extended to the field of mental health. Aid for vocational education was increased from $21.3 million a year to $35.6 million. Grants for agricultural research were increased by amounts that will reach $20 million annually by 1951. Provision was made, to be effective at least until July 1, 1948, for 100-percent Federal financial support of the employment services after their return to the several States November 15, 1946, and a minimum of $42.5 million was appropriated for grants to the States beginning November 16. The Social Security Act Amendments of 1946 increased the annual amount of grants under Children's Bureau programs from $11.2 million to $22 million. These amendments also changed the basis of Federal aid for public assistance, raising costs for the fiscal year 1947 by $135 million above the $484 million required before the amendments.19/

The postwar developments in grants are largely an extension of prewar trends; the same types of functions are being aided, the same general purposes are being served. Federal aid apparently will remain an important factor in supporting certain State and local expenditures. In view of the various grant-in-aid acts that have recently become law, Federal aid could conceivably grow from about $760 million in 1945-46 to nearly $2 billions in 1947-48 (the Budget Bureau had estimated 1948 grants at about $1.5 billion).

In a longer view, the total amounts of Federal aid may recede when the temporary postwar grants expire, but the level will probably remain substantially higher than before the war. If one may judge from the experience of the 1930's, another severe economic crisis may cause a sharp upturn in the amount of Federal aid.

18/ The act authorizing these advances (War Mobilization and Reconversion Act of 1944, 58 Stat. 785), which are to be repaid when construction of the projects is undertaken, did not authorize any fixed appropriation. In 1945 and 1946 $30 million was appropriated for this purpose, of which $900,000 was used for administration. Of the remainder, advances of $1,325,716 were made in 1945 and $27,774,284 in 1946.

19/ Other factors than the amendments also contributed to this increased cost.

In any case, the present magnitude of grants warrants devoting attention to the bases on which the grants are allocated and to the requirements of State and local financial participation explicit or implicit in various Federal grant programs. The bases on which the aids are given may be critical for the budgets of many governmental units, and they may also have an important impact upon the economies of entire regions as well as of States and localities.

CHAPTER II

AN ECONOMIC INTERPRETATION OF GRANTS-IN-AID

Grants-in-aid and other intergovernmental fiscal devices are the product of a variety of factors operating not only in the United States but in every other major Federal Government in the modern world, and in many national states as well. These factors might be catalogued as geographical, economic, fiscal, and constitutional.

Geographical Considerations

The improved means of transportation and communication and the modern mass-production economy have greatly heightened the interdependence of the areas within national boundaries. As each area and region tends to produce those items in which it has the greatest comparative advantage, this specialization means that the area is increasingly dependent on others for items in which they have a comparative advantage. While individual nations may continue to practice economic autarchy—self-sufficiency—no nation attempts to carry that self-sufficiency down to its constituent units. Trade across national boundaries is still hampered and restricted by most nations, but each practices substantially free trade within its boundaries. Similarly, movements of persons are much greater within than across national boundaries.

As a result, this Nation has come to recognize that the level of certain governmental services in any one area is of interest to all, regardless of place of residence. An epidemic in one area may quickly spread to others. Poor roads in one State hamper the free commerce of persons and goods across the Nation.

Much the same holds true for the counties within a State. As a consequence, States have come to the aid of localities with respect to functions in which there is a State-wide interest, just as the Federal Government has aided States in support of functions in which there is a national interest.

Economic Considerations

In addition to the above factors, nations have found that what helps one often helps all. Thus, measures that improve the productivity of farms lead to better diets for all, often at lower prices. Agricultural experiment stations, agricultural extension services, and land-grant colleges of agriculture have benefited not only the farm population but the entire economy of this Nation and probably of the world. Few individual farmers could give the time, effort, and money needed to engage in basic research on methods to improve land, crops, and livestock. Many States might not have adopted such programs but for the existence of Federal aid.

Similarly the national interest in forest crops has led to Federal aid to protect the growing crops from forest fires, damage from which not only hurts the owners but also destroys a basic national resource--to say nothing of the danger to other property and life itself from forest fires.

Adequate and low-cost transportation, by water, rail, road, and air, benefits all producers and consumers. Often Federal aid has seemed to be the only way to assure such means of transportation and communication for all.

In many other ways the interdependence of the national economy makes it advisable for the Federal Government to aid States, especially the poorer States, to support public services. The wealthy States support such aid because they are dependent on the others for markets, raw materials, and labor supply.

The economic system alone does not and cannot provide economic security for everyone. Yet the American economy is able to support such security through public action. To provide economic protection against the hazards and insecurity of age, unemployment, untimely death of family wage earners, and blindness, this country uses grants-in-aid, among other measures. Humanitarian considerations alone justify public action, but it may also be noted that the economic effects of the aids are helpful to the economy, in that they promote purchasing power not only at times when that is most necessary, but also among groups who would otherwise be "out of the market" and in regions that otherwise might not be able to provide for their needy.

Fiscal Consderations

In the early days of this Nation the Federal Government held a tremendous public domain, gained in part by the surrender of claims by the respective States. While the Federal tax and customs revenue was small by contrast to present yields, it was adequate for the time. State and local units were often less fortunate from a fiscal point of view. Thus, during the first century of our national life the Federal Government made, from time to time, land grants to the States and townships, largely for educational purposes but occasionally for aid to transportation as well.

The inability of many localities adequately to finance certain governmental services and the inflexibility of local sources of revenue led to State aids to local units many years before the fiscal inability of States became a major reason for Federal aid. Probably not until the depression of the 1930's did the fiscal weaknesses of large numbers of States become a matter of sufficient concern to stimulate substantial Federal aids.

The fact that inequalities in income and wealth existed among the States just as among local units had, of course, long been realized. But these differences had seldom led to a major break down in public functions. The Federal Government had assumed responsibility for State debts growing out of the Revolutionary War; and difficulties in some States arising out of State bank notes had caused the Federal Government to drive such bank notes out of existence by a 10-percent tax. A few States may have "overreached" their borrowing power before 1930, but none of these experiences had occasioned new regular Federal aid.

The exigencies of the depression focused attention on the problems of poverty—the poverty of families and individuals unable to provide even their minimum needs, and of State and local governments unable to cope with the pressing demands this welfare load and other governmental responsibilities placed upon their shrinking resources. Private resources, which theretofore had provided a substantial amount of the funds needed for relief of poverty-stricken individuals, were also drying up in face of the unprecedented need and as a result of the decline in incomes of their supporters. The fiscal weakness was apparent not only in States normally considered to be relatively "poor" but also in States that were thought to be relatively prosperous.

Only the Federal Government could borrow at low interest rates, or impose the severe taxes that would be necessary to meet such demands. In contrast to State and local fiscal powers at such a time, the Federal fiscal powers seemed great indeed. (It took a World War to demonstrate just how great Federal fiscal powers are in face of a crisis.)

With the disparities that exist among States in income and wealth, it is clear that without Federal aid the poorer States can maintain governmental services comparable to those in richer States only by the expenditure of substantially greater tax effort. Not without reason, these States have often hesitated to levy the heavy taxes this would require, for fear of driving out the business enterprise they sorely need to improve their economic plight. As a consequence, public services administered without Federal aid in these States have suffered, and when Federal aid has taken insufficient account of their needs and fiscal ability, even the aided services have been performed at levels substantially below those in other parts of the country. Suffice it to note here that fiscal considerations have come to support geographical and other economic considerations as reasons for Federal aid. The proportionately greater taxing and borrowing power of the Federal Government revealed by the war suggests that Federal grants may find increasing support.1/

Administrative and Constitutional Considerations

Having decided to support a function, Congress has at least two important reasons for often choosing to use grants rather than provide for Federal operation of the service. The first may be the administrative reason that it desires to leave the operation of the particular service to local and State control, which is closer to the people. Each State must enact legislation to accept the Federal aid offered, but it maintains a large share of control over the way in which the funds are spent in that State. This procedure is in keeping with national traditions of local enterprise, initiative, and democratic controls.

The second reason is a constitutional one. Congress has certain, delegated powers and the inherent powers necessary and proper to their exercise. Many of the functions that Congress has chosen to aid are clearly within the scope of its general powers, and the choice between direct administration and aid was one of policy only. But many other functions that Congress has chosen to aid seemed, at least until recently, to be open to constitutional assault in the courts if administered directly, but less vulnerable if grants-in-aid are the vehicle of Congressional action.

The question of Federal power to aid a function in absence of specific power to administer the same function directly was brought before the United States Supreme Court in Massachusetts v. Mellon, and its companion case, Frothingham v. Mellon.2/

1/ It is now occasionally argued that the existence of a substantial Federal debt growing out of World War II, when compared with the cash or debt position of the State governments generally, is evidence of the relative weakness of the Federal fiscal powers and strength of State fiscal positions. The argument neglects to note that not all States are debt free or have such strong cash positions. It further ignores that this favorable financial position of some States is temporary and largely occasioned by the wartime necessity to defer essential construction and maintenance. When States are again able to carry forward this construction and maintenance, these reserves will rapidly diminish. Further, the current high prices and rising wage levels are eating into resources that might otherwise be used to make up the deficit in essential public construction. Finally, it misses the point of the wartime fiscal experience: the Federal Government was able to borrow unprecedented amounts and levy greater taxes than ever before experienced by this Nation, without any break down. None of the States could undertake a comparable feat.

2/ 262 U.S. 447.

These two cases involved a challenge of the constitutionality of the Sheppard-Towner Maternity Act of November 23, 1921,3/ which provided grants to States for a period of 6 years for cooperative work in reducing maternal and infant mortality and in protecting the health of mothers and infants. The former case was an original suit brought by the Commonwealth of Massachusetts for herself and as the representative of her tax-paying citizens. The latter, an appeal from a decree of a lower court, was a taxpayer's suit brought on the ground that the allegedly unconstitutional statute in effect took Mrs. Frothingham's property, through taxation, without due process of law.

The decision considered whether Congress, in passing this statute, had invaded a field reserved to the States. The Court suggested that it had not: "Probably it would be sufficient to point out that the powers of the state are not invaded, since the statute imposes no obligation but simply extends an option which the state is free to accept or reject."

Regardless of this question, the major issue in these cases revolved about the right of a State, on its own and its citizens' behalf--as well as the right of a private taxpayer--to have a remedy at law in such a situation. The Court ruled that the "cases must be disposed of for want of jurisdiction without considering the merits of the constitutional question," adding that the question of usurpation of the reserved powers of the several States "is political, and not judicial in character, and therefore is not a matter which admits of the exercise of the judicial power." The State has no power to sue on behalf of its citizens because the burden of taxation falls upon the inhabitants of the States who are properly within the realm of the Federal taxing power as well as of that of the States in which they reside. Moreover, in Mrs. Frothingham's case, the Court held that the interest of a taxpayer of the United States "is shared with millions of others, is comparatively minute and indeterminable, and the effect upon future taxation of any payment out of the (Federal) funds, so remote, fluctuating and uncertain, that no basis is afforded for an appeal to the preventive powers of a court of equity."

These cases clearly established that neither the disaffected State nor the unwilling taxpayer can successfully challenge grants-in-aid as a method of spending for the general welfare. Thus these cases encouraged the use of grants-in-aid, at least until the Court held, in 1936, that the power to spend for the general welfare "is not limited by the direct grants of legislative power found in the Constitution."4/ More significant decisions on this point were given a year later, on May 24, 1937, when the Court sustained the use of the tax credit device and, inferentially, the conditional grant in aid, in disposing of complaints against the Federal-State unemployment insurance program of the Social Security Act, as not being unconstitutional coercion of the State or taxpayer.4A/ In a companion case upholding the old-age titles of the

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3/ 42 Stat. 224.
4/ United States v. Butler et al., 297 U.S. 1.
4A/ Steward Machine Co. v. Davis, 301 U.S. 548.

Social Security Act, Justice Cardozo affirmed that United States v. Butler settled that "Congress may spend money in aid of the general welfare."4B/ The subsequent cases tending to protect the use of such power against assault in the courts by aggrieved States, taxpayers, or injured corporations 4C/ further "immunize" this power and thus also tend to permit its greater use. These cases may thus have narrowed the constitutional margin between grants-in-aid and direct Federal administration.

The geographic, economic, fiscal, and administrative considerations each reinforce the other in support of aids from central to local units, and especially Federal aids to States. They represent some of the basic reasons behind the making of grants--it may be well at this point to examine the specific purposes served by grants-in-aid.

Purposes of Federal Grants

Several different purposes may be served by grants-in-aid, although each grant need not serve all purposes. Certain of these purposes can also be served by devices other than grants, but grants are most adaptable to the achievement of all. The objects for which grants may be adopted are as follows:

1. To encourage or stimulate the States to develop or expand certain services. The narrowness with which the functions to be aided have been defined from time to time attests that the Federal Government has often wished to develop or expand particular public services, frequently without regard to the state of development of related public services in the several States.

2. To assist the States to finance some kind of "national minimum" in certain public services. The frequent use of minimum allotments to each State in various grants and the ceilings on the amounts of aid under public assistance and other of the matching grants illustrate the intent to finance a minimum and no more.

3. To secure for the Federal Government a measure of leadership with respect to certain State and locally administered functions of national interest 5/ and to assure adequate

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4B/ Helvering v. Davis, 301 U.S. 619, especially at pp. 640-645; reaffirmed in 1944 by Justice Roberts, for the court, in upholding the United States Housing Act: City of Cleveland v. United States et al., 323 U.S. 329.

4C/ For example, see Alabama Power Co. v. Ickes et al., 302 U.S. 464; Duke Power Co. v. Greenwood County, 302 U.S. 485; and Tennessee Electric Power Co. v. Ickes, 304 U.S. 541.

5/ What constitutes a "national interest," apart from those enumerated in the Constitution is a question that, in the final analysis, only the Congress and the courts can answer.

performance of functions involving vital national interest. The public health grants might be cited as evidence of the Federal purpose to assume a measure of leadership with respect to this function, and assure adequate protection to the entire Nation against certain health hazards, many of which can only be fully attacked by cooperative Federal, State, and local action.

4. To combine within a Federal system the virtues of local control over administration of many functions with the superior money-raising powers of the Federal Government. Public assistance grants are an excellent example of this purpose, because they are the largest single grant-in-aid. During the depression, many State and local units were unable adequately to meet the relief demands that conditions placed upon them. Neither their taxing nor their borrowing powers were adequate to carry the burden of economic dependency of millions of persons. By the use of grants-in-aid, the Federal Government was able to help the States and their local units continue to carry their assistance loads and yet permit them to retain virtually complete control over the administration of the assistance payments.

5. To equalize to a greater or lesser extent service levels and relative tax burdens among the States and among persons in different income classes and different local jurisdictions, thus in effect, also to reduce disparities in incomes, among persons and among areas. To the extent that any Federal aid is allocated with reasonable regard to the need for the function aided, it is likely to equalize in some measure the level at which the aided service is performed in the several States. To the extent that the amount of State-local expenditures required to match Federal aid is related directly to the ability of these governmental units to finance the services themselves, it is likely to equalize as among communities the size of the tax burden necessitated by the expenditures for these services.

6. To improve the over-all Federal-State-local tax system so that it becomes more progressive and more uniform, by placing more of the cost of government on Federal and State income taxes, less on local property taxes. While Federal aids do not necessarily result in abandonment of local financial support of the aided service, they often serve to minimize the extent of local financial participation, because both the Federal and State governments tend to assume a greater share of the financial responsibility. Local tax revenues largely arise from the property tax, commonly considered a regressive tax. Today the bulk of Federal revenues comes from income taxes, and an increasing amount of State revenues also comes from such taxes. Therefore, most Federal aids

tend to make the total Federal-State-local tax system more progressive and more equitable. Moreover, the fact that such taxes are national or State-wide in inclusiveness tends to make for greater uniformity in the incidence of the tax burden.

7. To aid in approaching full employment, or to counter the business cycle. The depression aids for public works construction helped to counter the business cycle. Recent advances for planning postwar public works were justified at least in part on the theory that public construction might be necessary to forestall a "recession" during the period of reconversion. That these fears have not yet materialized does not detract from the fact that the grants may be used to counter the business cycle. Conversely, it is generally agreed that grants and expenditures for public works by all levels of government should be sharply curtailed in periods of impending inflation. This requires that public works be planned in advance so that they can be readily undertaken or shelved as fiscal considerations require. In line with this, it has been suggested that the Federal share for federally aided public works vary with the need for increased (or decreased) purchasing power.

The postwar highway, airport, and hospital construction grants now being made were recommended by the President despite the timing. In his budget message for the fiscal year 1948, he said, "The postponement of public works in good times and their expansion in hard times will make their contribution even greater. All postponable public works should be deferred at the present time. But the need to protect and improve our natural resources has become acute as a result of the war, and we must carry out the works included in this budget if we are to avoid waste."6/

Alternative Intergovernmental Fiscal Devices

The purposes listed may occasionally be served by fiscal devices other than conditional grants-in-aid--grants earmarked for a specific function. For example, the central government can: (a) perform the function itself, if within its constitutional powers; (b) strengthen the tax resources position of local units in the hope that increased funds will be used for the function the central unit desires to see performed; (c) offer loans or loan guarantees to the local unit to help it finance the function; or (d) make unconditional grants-in-aid--"block" grants. Each of these will be discussed below.

Shift of functions.--It has been decided from time to time that the national interest in certain functions amply justifies having the Federal Government take over full responsibility for support and administration of certain functions. Some functions have been assumed by the

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6/ 1948 Budget Message, pp. M 8-9.

Federal Government when the interest of State and local governments is negligible and national interest is strong. The Federal Government, for example, administers a leprosarium and an institution for narcotics addicts, while local and State health officers cooperate with Federal officials in finding and referring cases to the national institutions.

Some functions are federally operated but Federal expenditures for them virtually constitute direct aid to State and local governments, as, for example, the National Guard, defense housing and community facilities, and the depression born programs for youth (NYA and CCC) and work relief (WPA). Military security in time of war has led to making a National Guard of what were once State militia, but, except in times of war, the States have considerable latitude with respect to use of the National Guard. The public employment offices, recently returned to State control by act of Congress, were under direct Federal operation during World War II.

Within States, the State government has often taken over full administration and/or financial support of particular local services, including highway construction and maintenance, school systems, highway police patrol, and even metropolitan police forces. In addition, certain welfare institutions have tended to become State rather than local responsibilities. The constitutional inhibitions against transfer from State to Federal administration do not normally exist between local and State governments, apart from "home-rule" clauses in State constitutions.

Apart from the constitutional barriers to centralization of functions in the Federal Government, there are also political inhibitions impeding such changes. Although the broadening interpretation of the interstate commerce power has meant a substantial shift of regulatory power from the State to the Federal Government, this shift does not tend to affect materially the programs now drawing grants-in-aid. There may be some continuation of the trend of shifting certain local functions to the States, and additional State functions may eventually be transferred to the Federal Government, but one cannot expect such shifts to be immediately important as a device to solve problems of intergovernmental finance.

Another alternative to the shift of State functions to the Federal level is the creation of regional authorities. "The TVA is a concrete demonstration that ways and means can be devised to decentralize the administration of many of the functions of the central government."7/ However, despite TVA's notable successes in strengthening State and local governments, such a solution gives no assurance that minimum levels of service for functions for which a national interest exists will be achieved or that the burden of paying for these levels will be equalized.

7/ Lilienthal, David E., "Big Government Not Inevitable," National Municipal Review, Vol. 36, No. 2 (February 1947), pp. 65-71.

Shift of tax sources.--Instead of shifting functions to a larger unit of government having greater financial resources, additional tax powers or resources might be made available to the State and local governments. This proposal has been made with increasing frequency in recent years, when tax duplication and overlapping have become more significant. The Council of State Governments has suggested from time to time that the Federal Government withdraw from certain State and local tax fields (for example, motor vehicle, amusement, and certain sales taxes), but no significant steps have been taken in this direction beyond more intensive study of the problem. Progress along these lines is unlikely since the causes of duplication will also operate to hinder the relinquishing of tax sources; also, tax competition may prevent effective use of the new powers. A major weakness of the device is that it generally would benefit the wealthier States and localities more than the poorer ones; it cannot achieve equalization among them all.

Shared taxes and the tax-credit device.--Many States collect taxes from sources that cannot be reached effectively by local units and share the proceeds with their local units. This device works for greater uniformity of taxation within the State than if local units attempted to raise equivalent funds directly, and it promotes equity among taxpayers within the limits that it operates (assuming, of course, that the basis of sharing does not cause greater inequities than it corrects).

Similarly, the Federal Government shares certain receipts, such as those derived from public lands and lands on which forests and other natural resources are located, with the governmental unit in which the property is located. Closely related to these shared revenues are payments made in lieu of taxes which might otherwise be collected by the State and local units. The chief examples of these are payments made by the Tennessee Valley Authority to States and localities for loss of taxes on property and by the Federal Public Housing Authority to local governments to recompense them for the waiving of property and special assessment taxes on federally-aided slum-clearance and low-rent housing developments.

Shared taxes have the merit from the local point of view that they are not always earmarked for a specific purpose, as are grants-in-aid; thus they permit wide local latitude in the choice of purposes to which they may be devoted. From the standpoint of home rule, shared taxes aid the local treasury without requiring additional drains on it and tend to stabilize local revenues.

There is, on the other hand, the disadvantage that they tend to put the receiving unit in a financial strait jacket. Expansion into the occupied tax field is more difficult, and local revenues become more rigid, for the amounts received are more responsive to economic conditions than to local revenue needs. Finally, the problem arises as to the method of distribution. Allocation according to collection districts is easy, but allocation according to area of incidence may raise administrative difficulties; in either case, this type of allocation does nothing to allay inequities in income and ability. Use of some other measure in the allocation of a specific tax meets with considerable local resistance.

The tax-credit device allows a taxpayer to meet part of his tax liability to the National Government by receipts for a similar tax paid a constituent State. It is simply a tax "umbrella" put up by the central government, which "encourages" every State to adopt that specific tax. It is especially effective in overcoming fear of the use of the tax in the constitutent units; its notable successes to date are in the fields of estate and unemployment insurance taxes. State fears of emigration of tax sources if these two taxes were levied have largely disappeared, and both taxes are now general.

The inheritance tax credit added to State resources, in effect, by encouraging State occupancy of this tax field, but did nothing to encourage any specific uses of the added funds. The unemployment insurance tax credit was for an earmarked tax and was combined with a grant-in-aid; together they helped secure adoption of unemployment insurance laws in every State and Territory subject to the Federal tax.

Both measures—the shared tax and the tax credit—have merit as a means to a more coordinated and equitable tax structure. Unless the proceeds are earmarked, however, it cannot be certain that they will be used to develop, expand, or maintain a particular governmental service; furthermore, they normally are cyclical in their yield to State-local treasuries. Whereas grants-in-aid can be used to strengthen the financial position of the constituent units in time of economic adversity, the tax credit and the shared tax are more likely to yield decreasing amounts at such times.

Loans from central to local units.—An alternative open to a central government seeking to help its member units or to encourage them to perform specific functions is the use of loans either from the central treasury or guaranteed by the central government. This device has been used a number of times and has certain advantages.

When, for whatever reason, the credit standing of constituent units is poor, the central government can aid such units without great expense to itself by transferring to the local unit its better credit position. The Federal Government can practically create its own credit instruments because of its banking and currency powers.

Loans have been useful in promoting the building of self-liquidating or reproductive public works, such as highways, housing, and rural electrification, but as a device to meet relief and public assistance needs in periods of widespread unemployment they have not proved fully equitable or very successful. Loans can help cover temporary weaknesses in specific localities but are not adapted to the regular financing of continuing public programs on a uniform, equitable basis. Their inadequacy was clearly indicated during the depression of the thirties.

Unconditional, or "block," grants.—The Federal Governments of Australia and Canada have developed the use of an unconditional grant to their States and Provinces, and England also uses the block grant to aid her local units. The experience of these countries with unconditional grants is sufficiently interesting to warrant brief attention here.

1. England. Grants-in-aid to local units in England are more than 100 years old. Despite previous attempts to coordinate and consolidate them, it was not until 1929 that significant progress was made along these lines; in that year, with the passage of the Local Government Act, the block grant was instituted. This grant replaced many, though not all, of the specified-purpose grants and was designed to aid local units in meeting need for services, at the same time relieving taxpayers of undue burdens. Part of the block grant, or General Exchequer contribution, was used at first to compensate counties and county boroughs for derating certain types of real property. The percentage of this compensation was reduced over the years, and by the fiscal year 1948, according to the provisions of the act, it will be abandoned. The remainder of the grant is distributed according to a weighted population formula based on total population, number of children under 5 years of age, ratable value, number of unemployed workers, and the population per mile of public road.8/ Part of these sums are distributed in turn to municipal boroughs and urban and rural districts.

8/ The steps followed in this allocation are: the estimated population of the area in a base year is increased (1) where the number of children under 5 years of age per 1,000 population is more than 50, by the ratio of the excess to 50; and (2) where the ratable value per capita is less than 10 pounds sterling, by the percentage that the amount of the deficiency bears to 10. If the average number of insured unemployed men and 10 percent of the insured unemployed women during 1927, 1928, and 1929 exceeded 1.5 percent of the total population, the above result is further increased by a percent equal to 10 times the excess. For the counties only, there is a still further increase based on the number of people per mile of public road. If it is less than 100, the population is increased by the percentage computed by subtracting the population per mile from 200 and dividing the result by 200. If the population per mile exceeds 100, the weighted population is weighted further by the percentage that equals 50 divided by the population per mile. (Bowen, Howard R., English Grants-in-Aid, University of Iowa Studies in Social Science; Vol. XI, No. 1, 1939, p. 35.)

The Local Government Act of 1929 "made a beginning, but only a very small one, in this direction (a distribution of grants conditioned largely on factors relating to need and ability), and its effect is fully offset by the nonformula grants where the basis of distribution is local expenditure or some other criterion which results in giving the richest communities the largest grants."9/ The weighted population formula alone would not effect full equalization.

Under recent statutes, the block grant has amounted annually to 22.5 percent, on the average, of the total expenditures of local authorities met from rates (property tax), but particular areas of generally low fiscal ability or those greatly affected by the war still represent a problem. In the Coalition Government's view, an alteration of the block grant is the best method of solving the difficulties of these areas, and a study to that effect was recommended.10/ In addition, the effect of the new social security legislation on redistribution among governments of expenditures for welfare security will have an important bearing on the situation.

2. Canada. The experience of the Dominion of Canada with unconditional grants to its Provinces seems to have been less effective. The earliest grants, growing out of the establishment of the federation in 1867, were compensation both for the loss to the Provinces of revenues and for the inequities arising from Dominion assumption of Provincial debts. The unconditional grants became the source of much debate and bargaining; their administration by the Dominion was rarely, if ever, positive in its approach to maintaining a national minimum standard of service. In the opinion of one student, the history of conditional grants has also been one of weak control together with constitutional and political barriers to effective Dominion-Provincial cooperation.11/

The difficulties of the Dominion Government in coping adequately with the problems of federalism came to a head during the depression, and a Royal Commission, known as the Rowell-Sirois Commission, was appointed in 1937 to study the federal structure. The Commission reported in 1940 and recommended that the Dominion "balance" rather than "initiate"

9/ Ibid. p. 106.

10/ British Ministry of Health, Local Government in England and Wales During the Period of Reconstruction, January 1945.

11/ See Maxwell, James A., Federal Subsidies to the Provincial Governments in Canada, 1937, for an analytical and detailed evaluation of Canadian grants; and the same author's "Recent Intergovernmental Fiscal Relations in Australia and Canada," Bulletin of the National Tax Association, Vol. 32, February 1947, pp. 138-142.

government services through the payments of national adjustment grants.[12] Unconditional grants were preferred to conditional ones. The war, however, interrupted action on the recommendations, and the wartime exigencies threw greater responsibilities on the Dominion. For 5 years [12A] Provinces vacated the income and corporation tax fields in return for payments in lieu of normal revenues. The war had some effect on attitudes toward the role of the several governments, and the concept of Federal responsibility for full employment won increased support.

3. Australia. Australian federalism has seemed to work more smoothly than the Canadian plan, despite as great a variation among the States in economic resources and extent of development. Perhaps this is because the Australian system, through its Grants Commission, has established systematic procedures for determining, according to a series of standards, the size of the grants to the States. This Commission was established in 1933 after recurrent pleas from the less populous States for financial assistance. The Commission examines the claims and makes recommendations for appropriate assistance to the less financially able States, over and above such aid as they receive for specified functions.

The Grants Commission adopted as its foremost principle that of financial needs, rather than the Canadian-type principle of compensation for disadvantages arising from Commonwealth policies. The Commission defines its principle as follows: "Special grants are justified when a state through financial stress from any cause is unable efficiently to discharge its functions as a member of the federation and should be determined by the amount of help found necessary to make it possible for that state by reasonable effort to function at a standard not appreciably below that of other states."[13] The aim is a minimum standard arrived at by comparing the finances of the claimant States with those of the nonclaimants.

Several steps are involved in the process. The first is to adjust budgets for a recent year for differences in accounting procedure and irregular items and express the results on a per capita basis. The first approximation of the grant was originally the difference between the adjusted deficit of the State and the normal deficit standard, that is the average deficit of the nonclaimants. Since 1940, however, the nonclaimant budgets produced a surplus and the normal budget adopted became a balanced budget, to which the budgets of the claimants are to be raised. Further adjustments are made for variations in the cost of providing services due to variations in area served and population density, for relative severity of taxation, for loan losses arising from faulty policy in the past, and for the disparity between the year on which the grants are calculated and the current financial needs.[14]

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[12] Hodgetts, John E., "Problems of Canadian Federalism," State Government, June 1945, p. 95 ff.

[12A] At least seven of the nine provinces have subsequently agreed to continue through 1951 cooperation with the Dominion as to taxation and grants.

[13] Commonwealth Grants Commission, Third Report, 1936, par. 164.

4. Summary evaluation.--The unconditional grant can be an improvement on the shared tax, in that it can be apportioned according to some generalized measure of need, independent of the tax sources and tax incidence, and in that it can be dependably uniform throughout the business cycle, or even countercyclical if the central government chooses.

As an alternative to conditional grants, the unconditional grant gives much greater weight to local autonomy in the choice of functions to be performed locally and considerable weight to equality of the burden of taxation. At the same time, it gives little or no weight to the general interest in the performance of specific functions and to the equality of performance of such functions in all units. Equity among potential recipients of government services in different localities has only indirect support at best. Properly devised, conditional grants can promote both equality of tax burdens and of public services.

As a supplement to a group of conditional grants, there may be a desirable place for the unconditional grant. It would then minimize the competition between aided and unaided services, strengthen local finances, and help secure equity among taxpayers supporting the various services not aided by conditional grants. This study, however, is restricted in the main to conditional grants.

Conditional grants-in-aid as fiscal tools.--Grants-in-aid are tools uniquely adapted to serve certain purposes attendant upon cooperative Federal-State and State-local programs. Grants might well be used to assist the States to achieve a national minimum in certain broadly defined public services. Too often each new grant-in-aid proposal has been viewed in isolation, rather than in relation to the existing complex structure and with a view to bringing order into Federal-State-local fiscal relations. Grants should be considered along with other fiscal tools, and whichever is superior in a given set of circumstances should be used.

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[14] Commonwealth Grants Commission, Eleventh Report, 1944, ch. III.

CHAPTER III

THE PRINCIPLE OF EQUALIZATION

Equality is a concept in American law that has a long and honorable history. Stemming at least from the Magna Carta and English common law, the concept of equality grew in the minds of pioneer Americans until Thomas Jefferson could pen, and his fellow delegates sign, that "all men are created equal, and . . . endowed . . . with certain inalienable rights . . ." Most of the amendments to the United States Constitution have broadened those rights and that equality under law.

The preceding chapter listed seven purposes of grants. This study is largely confined to an implementation of the fifth purpose, namely, to equalize to a greater or lesser extent service levels and relative tax burdens among the States and among persons in different income classes and different local jurisdictions, and thus in effect, also to reduce disparities in incomes, among persons and among areas. By inference, then, the study is also concerned with the second purpose: to assist the States to finance some kind of "national minimum" in certain public services.

Any actions taken by way of implementing these purposes will have consequences for the other purposes as well; a few of these are noted below, but no attention is given to additional measures that might lead to more effective achievement of the other purposes. Because equality and equalization are words that have many meanings, it may be well to set forth more explicitly the meaning intended here.

Types of Equalization

In its broadest sense, equalization might be defined to mean equality of income or equality of opportunity. The "American Way" certainly includes equality of opportunity as a desirable goal, but complete equality of income is no longer a goal even of a Marxian apologist. Undoubtedly the financing of governmental services from a progressive income tax tends to reduce inequality of income. Even if Federal grants should be increased to the point where they equal 1 or 2 percent of the national income, however, equalization in the allocation of grants will not effectuate substantial equalization of income. In the process of working toward equalization of certain governmental services, disparities in income will be reduced, but they neither should nor will be eliminated.

Equalization among all governmental services.—Equalization is here applied only to certain broad governmental services involving a national interest. If it is desirable to equalize these, it may be asked, why not equalize the level and burden of all governmental services? Several answers are possible. So long as there is no strong national interest in other functions of government, there is no political or constitutional reason for extending equalization to all other functions. Secondly, by their very nature many of these functions are optional, and are not necessarily desired by all units of government or in all areas; in some cases the services merely replace those which citizens might buy privately—e.g., recreation. These considerations plus the heterogeneity of the services involved make it not only undesirable but virtually impossible to equalize completely the level and cost of all governmental services. Finally, the functions already aided are among the most expensive in most State and local budgets, so that the equalization principle could now affect a substantial part of these budgets. However, the "block" grant, discussed in chapter II, could be used to provide approximate equalization for the other services, just as in other countries, given effective measures of need and of fiscal ability and an equalization formula.

Intra-program equalization.—Equalization is not yet applied within broad functional areas, much less among different functional areas. Federal aids are commonly directed toward special segments of a public service. For example, in the welfare field, Federal aid for public assistance is provided only for the aged, the blind, and dependent children. In the education field, vocational education and rehabilitation and colleges of agriculture and the "mechanic arts" are recipients of Federal aid, while the rest of the educational system operates on State and local resources. In the health field, there is a modest amount of Federal aid for a "general" public health program, but far more of the aid is earmarked for special health problems. The natural consequence of these actions is that needy persons who are over 18 years of age but younger than 65 seldom get the same consideration of their needs and resources as do other needy persons. State health officers have funds for special health programs at times when and in places where they do not have adequate funds for the basic public health program. And teachers of subjects for which Federal aid exists may draw salaries more generous than the other teachers in the same school, the latter being dependent solely upon local revenues and State aids.

In wealthy areas, State and local resources are generally adequate to provide equalization of services within each of the broad functional fields, notwithstanding the disequalizing tendencies of many Federal aids. In areas at the other end of the scale, however, the distortions caused by a series of aids for special segments of major functions may be much more severe. The solution to the problem here presented is not some difficult equalization formula; it is rather to change the emphasis from the special segments of the various programs aided to the general program, and to broaden the definition of the purposes to which Federal funds may be put. This would give the State and local governments more flexibility than they now have in adapting the programs to their own needs and circumstances.

Equalization of the tax burden of aided services.—This study links two facets of equalization, program levels and tax burdens, because an equalization of service levels in cooperatively financed programs (even minimum levels) cannot in fact be achieved without giving substantial attention to equalization of the burden of State and/or local support of the functions aided. The importance of this relationship will be clarified by the analyses in chapters V and VII. Most Federal agencies operating grant programs have been inclined to neglect the second aspect as being outside their province. Yet, to the States, the Federal Government appears as a single entity, expected to have its left hand take account of the impact of what its right hand does. In other words, all Federal grants together will fail to achieve the purpose of attaining a national minimum of services unless attention is also given to the burden that matching of Federal aid often places on the States. Furthermore, when the purpose of aid is to effectuate a national interest in a minimum, it is only fair that the burden of State and local taxes required for achieving and maintaining this national minimum should not fall more heavily upon taxpayers in some areas than in others.

The purpose as stated above is qualified "to a greater or lesser extent" because it is impossible to achieve perfect equality of the State tax burden created by the aided service, just as it is impossible to achieve perfect equality of performance of a governmental service. But acknowledging these limitations does not justify failure to try to achieve the maximum degree of equalization of both, within the limits of available knowledge and of administrative considerations.

Intrastate equalization.—Equalization among States needs to be accompanied by equalization within States with respect to the aided services, if the goals and purposes discussed are to be achieved. An appendix chapter discusses the application of equalization principles to intrastate financing of public services.

Some Consequences of Equalization

If Federal aids were apportioned so as to achieve a national minimum standard, through equalization allocation of grants on the basis of need and relative fiscal abilities of the States to provide minimum services, then several additional benefits would follow. Financial pressures on the poorer States would be lightened, permitting less use of regressive sales taxes and of repressive business taxes. The effect on income distribution by region and income class would be salutory for the national economy, especially for improving consumption. Governmental services would be more readily maintained should depression threaten.1/

1/ See Hansen, Alvin H., and Perloff, Harvey S., State and Local Finance in the National Economy, pp. 130-131.

Equalization Grants and the "National Minimum"

The grant-in-aid is especially adapted to secure a national minimum of essential services and at the same time permit the States and local units to build above that minimum, in response to local variations in the type of service needed and desired. Thus the emphasis upon the "minimum" permits as high a degree of local responsibility and control as is consistent with the national objectives.

There are some functions in which the national interest is so strong--and the local power to deal with the problem adequately often so weak--that direct Federal administration is best. Some of these functions are specifically mentioned in the Constitution, including post offices, coinage, international and interstate commerce, and Indian affairs. With respect to other functions involving a national interest, unless the advantages of direct Federal administration are substantially greater than those that attend cooperative Federal-State administration, the latter appears preferable. This is especially the case for certain functions that deal intimately with the welfare of large segments of the population, such as public welfare and education. The very size of the task often warrants making maximum use of State and local initiative; local interest in such functions, in turn, often calls forth additional support to extend the service far beyond the limits of the federally aided program.

CHAPTER IV

DESCRIPTION AND EVOLUTION OF FEDERAL GRANT ALLOCATION

The problem of the distribution of Federal grants-in-aid among States has received less attention in the past than questions of which function to aid or what proportions such aid should assume. Yet the Federal allocation influences the amount of money that a State has to spend for a particular service, which in effect determines the level of adequacy of the program. Equally important to adequacy, of course, is the effectiveness of the administration of the program, but it is not within the scope of this paper to deal with this aspect of the problem. Because of the importance of the distribution of funds, a brief description of the nature and evolution of Federal allocation formulas is helpful in putting an analysis of current formulas into historical context.

Allocation formulas cannot be considered apart from matching formulas, when the matching requirement exists; the total level of activity effected by the operation of both formulas together is the significant matter. Matching funds required of the States usually bear some uniform ratio to Federal aid; in one instance the matching varies with State per capita income.

Allocation formulas are of two major types: statutory and discretionary. Within either category, allocations may be based on one factor or a combination of several factors: uniform lump-sum amounts, some general or special measure of population, area, star route mileage, representation in Congress, and so on. For several programs, they depend on the amount of State-local expenditures for the purpose. In a very few instances, they are based on some relatively complex measure of specific program need.

Over the years, as the State functions aided by the Federal Government have increased in number and broadened in scope, bases for the apportionment of funds among the States have also changed in character. The evolution of allocation formulas, however, is not nearly so progressive as the growth, both in size and purpose, of the grants themselves. Thus, although today many of the actual and proposed allocation formulas are better adapted than were earlier ones to meet varying degrees of need in the several States, there are still large sums of money distributed among the States with only approximate regard to need and, in almost every instance, with no relation to the relative abilities of States and their subdivisions to finance the services themselves.

Earliest Measures of Allocation

The earliest grants were allocated among States in the simplest manner, either in uniform amounts or in proportion to representation in Congress. The latter factor corresponds roughly to population (although with some overweighting for small States) and thus is a crude measure of need.

The land grants for public schools and universities were uniform amounts to each geographical subdivision. Those for public schools were initially one section out of every township, to be reserved for the maintenance of public schools within the township, and to be granted to the inhabitants of the township.1/ Subsequently, the grants were increased to two and, finally, four sections of every township.2/ In addition, not more than two complete townships were to be given each State perpetually "for the purpose of a university," to be applied "to the intended object by the legislature of the State."3/

In 1837, the surplus in the United States Treasury was apportioned among the States in "proportion to their respective representation in the Senate and House of Representatives of the United States."4/ The Morrill Act of 1862, making land grants to the States for colleges for agriculture and mechanic arts, used the same basis for apportionment.5/ Each State was granted 30,000 acres of land or its equivalent in land scrip for each Senator and Representative in Congress to which it was entitled by the apportionment under the census of 1860. This act was the first to aid a State function for which the Federal Government assumed (later) a continuing responsibility. It was also the last of the general land-grant acts.

Measures of Allocation up to World War I

Except for the general "loan" of 1837, all grants to States until 1879 were land grants. In that year the passage of the act to aid education of the blind marked the beginning of a whole series of money grants to States under permanent legislation. From 1879 until the First World War, although a number of Federal aid acts apportioned funds

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1/ Ordinance of May 20, 1785. Journals of the Continental Congress, v. XXVIII, p. 375. The Ordinance of July 23, 1787 (v. XXXIII, p. 399) elaborated this grant and also reserved one section for the purposes of religion. For additional details on grants discussed in this chapter, see appendix B.

2/ The Act of August 14, 1848 (9 Stat. 330) for the organization of the Territory of Oregon contained an additional grant of the thirty-sixth section (as well as the sixteenth) in each township for public schools. All of the States admitted to the Union thereafter, except West Virginia, received 2 sections in every township, and Arizona, New Mexico, and Utah received 4 sections, numbers 2, 16, 32, and 36, in each township.

3/ July 23, 1787. Journals of the Continental Congress, v. XXXIII, p. 399.

4/ 5 Stat. 55 (1836).

5/ 12 Stat. 503.

among States in uniform amounts, distribution under some acts was made according to more refined measures of need, usually a population factor. A very few acts used an entirely new basis.

Grants for manufacturing and distributing embossed books for the blind and tangible apparatus for their instruction, initiated in 1879,6/ were, and are now, allocated according to the number of pupils in public institutions for the education of the blind. This factor is a direct measure of relative need within each State for the service.

Similarly, grants for homes for disabled soldiers and sailors are allocated among States on the basis of a uniform amount yearly for every inmate in such a home. The act of 1888,7/ initiating Federal grants for this function, provided for an annual payment of $100 for each inmate. An early amendment to the original grant set a historical precedent in that it was the first to require the States to match Federal funds with a similar amount. This principle of State matching has since become almost universal. Federal aid for this purpose was subsequently increased and since 1943 has been $300 yearly per inmate.8/

The bulk of the grants during this period, however, were uniform lump-sum allotments to States. No doubt a certain minimum sum is needed to provide the basic organization required in any State to perform the aided function, but such an allocation does not adequately measure each State's total need for a particular service. As an example of the lump-sum allotment, the Hatch Act 9/ to aid in financing agricultural experiment stations provided that each State receive annually $15,000 for this function; an additional $15,000 annually was authorized by the Adams Act.10/ The second Morrill Act of 1890 11/ provided for a grant of $25,000 annually to each State for the agriculture and mechanic art colleges established pursuant to the land grants of 1862 for this purpose; and the Nelson Amendment of 1907 12/ increased this sum by an additional $25,000 annually.

6/ 20 Stat. 467. The benefits actually received by the blind under this program, however, are in kind. Federal funds go to the American Printing House of the Blind, which in turn distributes books and teaching equipment.
7/ 25 Stat. 450. The matching provision was incorporated in the appropriation act for the fiscal year 1890 (25 Stat. 975).
8/ 57 Stat. 603.
9/ 24 Stat. 440 (1887).
10/ 34 Stat. 63 (1906).
11/ 26 Stat. 417.
12/ 34 Stat. 1281.

The first discretionary grant was authorized by the Weeks Act in 1911 for the purpose of cooperating with States in preventing and fighting forest fires, especially along watersheds of navigable streams.13/ The Secretary of Agriculture was empowered to enter into cooperative agreements on such conditions as he deemed wise, provided that each Federal allotment was matched by a similar amount from State and local funds.

Annual Federal grants for the maintenance and support of State and municipal marine schools, started in 1911,14/ introduced the first "open-end" or indefinite matching grant. An open-end grant is one for which there is no specific limit on the amount authorized in law and there is the implication that the Federal Government will advance or reimburse all or some stated portion of State (and local) expenditures for the program and that appropriation committees and Congress will agree to a deficiency appropriation if necessary. The more usual form taken by open-end grants is the offer of Federal aid within some indefinite, but implicit, limit. In the case of the grants for marine schools the amount of the Federal grant was unspecified except that it would match dollar for dollar sums expended by States or municipalities, within a maximum limit, however, of $25,000 per school. This grant was thus logically a forerunner of the arrangement adapted for public assistance financing in the Social Security Act.

A deviation from the consistent use of lump-sum apportionments for agricultural education came with the passage of the Smith-Lever Act in 1914.15/ This act, giving Federal aid for agricultural extension work, provided for the distribution of a large sum on the basis of rural population as well as a much smaller sum in uniform lump-sum allotments, the former to be matched dollar for dollar by State funds.

Allocation Measures from World War I Until the Depression

The Federal-aid highway program, in addition to being the first really significant grant-in-aid program from a fiscal point of view, departed markedly from the traditional closed-allocation formulas. The Federal Aid Road Act of 1916 16/ for aid in the construction of rural post roads laid down the basis for subsequent highway allocation formulas. Three factors were specified for use in the allocation of funds among States--area, population, and rural and star route postal mileage--

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13/ 36 Stat. 961.
14/ 36 Stat. 1353.
15/ 38 Stat. 372.
16/ 39 Stat. 355.

and all three were given equal weight. A limitation was placed on the use of the formula, however, in that aid could not exceed $10,000 per mile of road constructed. Dollar for dollar matching of Federal funds by State funds was required.

Except for highway grants, the other new or increased grants in this period tended to use lump-sum allotments or some general or specific population factor. At least one act permitted discretionary allocation. The matching principle became generally accepted during this period.

With the passage of the Smith-Hughes Act in 1917,17/ annual Federal aid was extended to a new function--vocational education. Funds for the various major groups of vocational subjects to be aided were, and are still, allocated among States according to some measure of population. Under this act, Federal grants for salaries of teachers, supervisors, and directors of courses in agricultural subjects are allocated on the basis of rural population; for courses in trade, home economics, and industrial subjects, on the basis of urban population; and for the preparation of teachers of vocational education subjects, on the basis of total population. For each category, the minimum allotment to a State in each fiscal year was originally $5,000 but was increased finally to $10,000. All Federal aid must be matched dollar for dollar by State and local funds. Additional annual appropriations were authorized in 1929 18/ for salaries of teachers, supervisors, and directors of agricultural subjects and of home economics. Funds for the former are allocated among States on the basis of farm population alone, for the latter on the basis of rural population, and 50-50 matching is required for both. The use of farm rather than rural population as a base for the allocation of funds for agricultural subjects represents an effort to relate the distribution formula more closely to the population group to be served. The separation for allotment purposes of home economics from its prior linkage with trade and industrial subjects appears to indicate a desire to aid home economics departments for rural rather than urban schools. Further legislative refinements along these lines were made later, together with additional appropriations, and will be discussed below.

Closely allied to the grant program for vocational education is that for vocational rehabilitation, started in 1920. The Smith-Bankhead Act 19/ of that year provided for grants to States for the vocational rehabilitation of persons disabled in industry and for their

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17/ 39 Stat. 929.
18/ 45 Stat. 1151.
19/ 41 Stat. 735.

placement in employment. These grants are allocated among the States according to population with a minimum allotment in any year of $5,000 to a State and a requirement of 50-50 matching by the State. A subsequent additional appropriation,20/ started in 1930, follows the same pattern except that the minimum allotment under that appropriation is $10,000.

Other functions that received Federal aid for the first time during this period were in the field of health. A deficiency appropriation in 1916 started a series of small grants for special studies and demonstration work in rural sanitation. States requesting demonstrations had to agree to pay one-half the costs.20A/ The Chamberlain-Kahn Act 21/ of 1918 made appropriations for two fiscal years for the prevention and control of venereal diseases. Federal funds were distributed among the States on the basis of population, and in the second year the allotments had to be matched equally from State funds. The Sheppard-Towner Act of 1921, which provided funds for the promotion of the welfare and hygiene of mothers and infants for a period of 6 years,22/ heralded the introduction of the Federal Government into the field of maternal and infant health. These funds were distributed among States partly on a uniform lump-sum basis and partly according to population. Of these apportionments, $5,000 of each State's lump-sum allotments and the total population allotments carried a requirement of equal State matching.

In addition, during this period, Federal grants were increased to a number of already established Federal-State functions: education of the blind, State homes for disabled soldiers and sailors, highways, agricultural experiment stations, and extension work. Each additional grant was allocated among States on the same basis as its predecessors, with minor changes in the highway grants.

The 1921 Highway Act 23/ crystallized the 1916 allocation formula into basic legislation ("Section 21") for the interstate and intrastate Federal-aid highway system. The major modification of the formula at that time was that the Federal percentage (normally 50 percent) was increased for States containing unappropriated public lands and non-taxable Indian lands exceeding 5 percent of their total area by one-half the percentage that the area of such lands is of the total area of the State. The maximum Federal aid per mile was also increased by the act, and in the cases just mentioned this maximum was further raised in proportion to the increase in the Federal-aid percentage.

20/ 46 Stat. 524.
20A/ 39 Stat. 21. See Mustard, Harry S., Government in Public Health. Commonwealth Fund, New York, 1945, p. 60.
21/ 40 Stat. 886.
22/ 42 Stat. 224; funds were later extended through June 30, 1929; 44 Stat. 1024 (1927).
23/ 42 Stat. 212.

A temporary Federal grant was made by the Clarke-McNary Act of 1924 24/ for cooperative farm forestry and forest fire protection. The funds could be used at the discretion of the Secretary of Agriculture, who was again empowered to enter into cooperative agreements with State officials. Federal aid had to be matched by an equal amount of State funds.

Measures of Allocation During the 1930's

The depression and the resulting changes in the role of government caused a tremendous expansion in Federal grants to States, both as to functions covered and the amounts of money involved. The urgencies of the day focused greater attention than previously on the problem of distribution of these large sums of money. Consequently, many of the allocation formulas written into legislation or adopted by administrative interpretation of general statutory language were more complex than the earlier ones, largely because of the effort to measure need more accurately. The first active recognition of the principle of equalization came in this period. Certain of the existing formulas were changed somewhat to adapt them better to the ends sought. At the same time, however, many of the old formulas with their crude measures of need were repeated in new legislation.

Relief, public works, and employment office acts.--The first of the depression grants came with the Emergency Relief and Construction Act of 1932 25/ to relieve destitution, broaden the lending powers of the Reconstruction Finance Corporation, and create employment. To accomplish part of this objective, $120 million in Federal aid was appropriated for highway construction work, to be distributed according to the section 21 formula (1/3 area, 1/3 population, and 1/3 post-road mileage). The amounts apportioned to the States were available as a temporary advance and could be used by the States to match their regular Federal-aid apportionments. These amounts were to be reimbursed, however, beginning with the fiscal year 1938, by annual deductions from the regular allotments.

Subsequent highway-aid legislation, to increase employment through emergency construction, did, however, alter the distribution formula. Grants for this purpose under the National Industrial Recovery Act of 1933,26/ the Hayden-Cartwright Act of 1934,27/ and the

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24/ 43 Stat. 654.
25/ 47 Stat. 709.
26/ 48 Stat. 200.
27/ 48 Stat. 993.

Emergency Relief Appropriation Act of 1935 28/ provided for the apportionment of 7/8 of the funds for the Federal-aid highway system according to the usual formula; the other 1/8 was allocated on the basis of population. This, in effect, gave the population factor the greater weight of 10/24, as compared with 7/24 for area and post-road mileage, each. This adjustment in the formula channeled more of the highway aid into the most populous States, where the unemployment problem was more acute. Matching was dispensed with during this emergency period.

The 1935 Emergency Relief Appropriation Act 28/ also gave Federal aid for the elimination of grade crossings. The distribution of funds for this purpose was based on an adaptation of the basic highway-aid formula. One-half of the funds was distributed according to the population, 1/4 according to mileage on the Federal-aid highway system, and 1/4 according to railroad mileage (instead of area). No State matching was required.

To supplement the normal Federal-aid functions, enormous grants were made at this time for public works and direct relief. The Emergency Relief and Construction Act of 1932 29/ provided that the Reconstruction Finance Corporation might make "self-liquidating" loans to State and local governments to aid them in providing necessary relief. The device of loans, intended to stimulate State-local expenditures for this purpose, did not prove effective and was soon replaced by grants. The Federal Emergency Relief Act of 1933 30/ authorized one-half billion dollars for grants for relief. Half of these funds could be used to reimburse 1/3 of the expenditures of State and local governmental units for relief; the remainder was to be used when the funds available within a State from all sources, including Federal, were found to be below the estimated needs for relief. Considering all funds together, not more than 15 percent of the total Federal appropriation could go to any one State.

From the date of this act through the fall of 1937, when the social security grant programs were in virtually full operation, more than $3 billion was authorized by Congress for relief purposes, through the medium of the FERA. (Another $3 billion was expended directly rather than through grants in 1936 and 1937 by the Work Projects Administration.) These grants are worthy of close interest because of their enormous size and the various methods of allocation used.31/ It was

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28/ 49 Stat. 115.
29/ 47 Stat. 709.
30/ 48 Stat. 55.
31/ Williams, E. A., Federal Aid for Relief, 1939, p. 182.

left to the discretion of the Administrator to distribute most of the funds among the States, and the traditional matching requirement was waived in most cases.

According to one authority, the original act of 1933 was the product of a compromise between two schools of thought in Congress.32/ One, fearing the use of discretion by an administrative official, wanted to write the allocation formula and matching provisions into legislation. This group claimed that the matching approach was desirable because it "gave more to those States with the greater expenditures, or 'need.'" The other group recognized that State expenditures did not necessarily represent an accurate measurement of need and that reimbursement would only increase the inequity, since the States spending the most would receive the most. This school held out for administrative discretion in the disposal of the funds.

Before the first year was out, all relief grants were made on an administrative basis; later grants did not include matching provisions. "Fifty-fifty matching runs contrary to the principle of equalization. It was particularly unsuited to the realities of the emergency relief situation of 1933-35."33/

"The activities of the FERA represent the first conscious attempt by the Federal Government to distribute funds with the aim of equalization in view."34/ From the end of 1933 through the first half of 1934, grants were made on the basis of statements submitted by the State officials on relief needs, State and local funds available, and the amount of Federal funds needed. This basis was abandoned in the fall of 1934 as being too subjective. Then, mathematical formulas were worked out to determine the relative ability of a State to finance a share of the program. To ensure that each State was making the same effort and bearing the same burden, quotas were worked out on the basis of various series of economic data bearing on relative status, including measures of production, sales, income, wealth, bank deposits, population, tax collections, governmental receipts and expenditures, and assessment ratios. Four tentative quotas were computed on the basis of these data, and a fifth was devised to take into account some factors that could not be measured, such as restrictions on taxation and indebtedness and local attitudes.35/ The final quotas were used as a basis for negotiation between the States and the Administrator. This method resulted in great divergences in the Federal Government's share in the relief program of different States.

32/ Ibid., p. 183 ff.
33/ Ibid., p. 186.
34/ Ibid., p. 190.
35/ Ibid., p. 200 ff.

An approach to the problem of unemployment through placement of unemployed workers eventuated in grants to States for the establishment and maintenance of public employment offices. The Wagner-Peyser Act of 1933 36/ set up in the Department of Labor a United States Employment Service, which was empowered to make grants of money to States over a 5-year period. At least 75 percent of the funds had to be allocated on the basis of total population, and all Federal aid had to be matched by a similar amount of State and local funds together; furthermore, at least 25 percent of the population allotment, and not less than $5,000 in any event, must be from State funds alone. The act was amended in 1935 37/ to require a minimum grant to each State of $10,000 annually.

Work relief, highway, and public employment office grants were also supplemented by grants for general public works. The National Industrial Recovery Act of 1933,38/ in addition to making grants for highway construction projects, allowed a large sum for public works. There had been a previous authorization of "loans" from the Reconstruction Finance Corporation to States and localities,39/ but title II of NIRA marked the extension of grants to this field. The Federal Emergency Administration of Public Works, created by this title, was engaged in operating Federal projects as well as in offering grants and loans for State and local public works projects. Additional funds were authorized by the 1935 Emergency Relief Appropriation Act.40/

"PWA allotments were not annual, recurrent lump grants distributed among the States on any quota system based upon population or any of the usual standards by which most of the previous Federal subventions had been allotted."41/ Funds for each project were applied for directly by the governmental unit undertaking it, and each project was judged on the basis of its own soundness from the legal, engineering, and financial points of view. Although no quota system was established, serious consideration was given to criteria which might be used to determine need for Federal aid and to make allotments. The main factors considered were population, unemployment, amount of relief expenditures, number of families being given assistance, per capita Federal revenues by States and regions, and area. None of these factors, it was felt, reflected adequately the need for public works, except the number of unemployed, and data on this were insufficient and inaccurate. Instead of a completely objective formula, rough quotas were worked out by giving a weight of 3/4 to population and of 1/4 to the estimated number of unemployed. These were used merely as a guide to prevent concentration of funds in one or more States.

36/ 48 Stat. 113.
37/ 49 Stat. 216.
38/ 48 Stat. 200 (title II).
39/ 47 Stat. 709.
40/ 49 Stat. 115.
41/ Williams, Juanita K., Grants-In-Aid under the Public Works Administration, Columbia Univ. Press, New York, 1939, Chapter IV.

The legislative maximum for Federal aid was 30 percent of the cost of labor and materials on each project. There was some consideration of varying the percentage and employing the maximum as a reward for economical expenditure; in the end, however, the uniform percentage prevailed. The maximum was raised to 45 percent in 1935, and since this percentage pertained to the total cost of the project, not merely labor and materials, the Federal share was thus virtually doubled.

The Social Security Act.--These temporary depression measures were eventually superseded by a long-range approach to the problem of unemployment and economic security. With the passage of the Social Security Act in 1935,42/ several new types of grants were adopted. By far the most significant of these were the grants for the three public assistance programs, which put the open-end matching grant into use on a large scale. The grants are open-end in the sense that there is no maximum on the total Federal aid authorized and in that Federal aid will match all reimbursable State-local expenditures. There are maximums, however, on the Federal aid per individual recipient per month. Federal aid for old-age assistance and for aid to the blind, under the original act, was in the amount of 50 percent of the payments to needy aged and needy blind, not including such portion as exceeded $30 per recipient per month. An additional 5 percent of these total amounts was granted for use in financing the costs of administration, or payments to individuals, or both. Federal grants for aid to dependent children were 33 1/3 percent of the expenditures for this purpose, excluding amounts paid to beneficiaries in excess of $18 for the first child and $12 for each additional child in the same home per month. These provisions were liberalized somewhat by the 1939 amendments to the Social Security Act.43/ The maximum Federal aid per recipient per month was changed from $15 to $20 in both the old-age assistance and aid to the blind programs. In aid to dependent children, the Federal share was increased to 50 percent of the payments up to $18 for the first child and $12 for each additional child in the same household per month. The legislation also changed grants for administrative costs for aid to the blind to 50 percent of the expenditures by States and localities for this purpose.

The 1935 act also created an unemployment insurance program on a Federal-State basis and provided payments to the States to cover 100 percent of the cost of the "proper and efficient" administration of the State unemployment insurance laws.

The Social Security Act also established the present three grant-in-aid programs of the Children's Bureau--maternal and child health, crippled children, and child welfare services. Under the provisions of 1935, grants for maternal and child health services totaled $3.8 million annually, Fund A of which provided $1 million to be allotted among States in uniform lump-sum grants of $20,000 and $1.8 million on the basis of the number of live births, and Fund B provided $980,000 according to financial need, as determined by the Secretary of Labor, after taking

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42/ 49 Stat. 620.
43/ 53 Stat. 1360.

into consideration the number of live births in each State. The Fund A allotments had to be matched by an equal amount from State and local funds, but no matching was required of Fund B allotments.

Grants for services for crippled children totaled $2,850,000 annually under the 1935 act, of which $20,000 went to each State and the remainder was allocated on the basis of need as determined by the Secretary of Labor after taking into consideration the number of crippled children in each State in need of the services and the cost of furnishing such services to them. The entire grant for this purpose had to be matched by a similar amount from State and local funds.

The original grants for child welfare services amounted to $1.5 million annually, $10,000 to be allocated to each State and the remainder on the basis of State plans except that each State's share was not to exceed its proportion of total rural population. No matching percentage was mentioned but it was specified that the grant was to be for payment of part of the cost of these services.

The amendments to the Social Security Act in 1939 increased the appropriations for these grants. For maternal and child health, the sum to be allotted on the basis of live births was increased from $1.8 million to $2.8 million and the financial-need portion, from $980,000 to $1,980,000. Grants for services to crippled children were increased from $2,850,000 to $3,870,000. In addition to the previous uniform allotment of $20,000 to each State, $1,830,000 was allotted on the basis of need, and both amounts were to be matched (Fund A). An additional $1 million was authorized, without a matching requirement (Fund B), to be allocated on the basis of the financial need of each State for assistance in carrying out its plan, as determined by the Secretary of Labor, after taking into consideration the number of crippled children in need of the services and the cost of furnishing such services to them; the latter two factors were the same as those in the other (Fund A) allocation according to need. Grants authorized for child welfare services were increased by $10,000 because of the extension of the title to Puerto Rico.

The unmatched Children's Bureau grants made on the basis of financial need are allotted by administrative discretion. For maternal and child health, the Children's Bureau in the past has used formulas that have taken into account the number of live births in each State, sparsity of population, excess infant and maternal mortality, and the continuance of special projects initiated during earlier years.44/

44/ See Hearings before the Subcommittee of the Committee on Appropriations, House of Representatives, 79th Congress, 1st session, on the Department of Labor - Federal Security Agency Appropriation Bill for 1946, Part I, pp. 315-325.

The Fund B allotments for services to crippled children have been made on the basis of a detailed set of formulas, taking into consideration the following factors: the number of crippled children in need of such services, the cost of furnishing services to them, per capita income, sparsity of population, cases of poliomyelitis, deaths of children from heart disease, number of crippled children on State registers, special programs for care and treatment of children with rheumatic fever or heart disease, and other bases of special needs. In the case of both grants, the factors have been weighted and have been changed from time to time, as have the weighting ratios. Beginning July 1, 1947, the Children's Bureau is using a simple equalization formula, described in chapter XI, for Fund B apportionments.

The Social Security Act also contained provisions regarding grant-in-aid programs for vocational rehabilitation and for public health work. The new funds for vocational rehabilitation were allocated among States in the manner provided by the 1920 act, as amended: on the basis of population with a minimum allotment of $10,000, and the allotments depended upon equal State-local matching. The 1939 amendments increased the total grant from $1.9 million to $3.5 million and the minimum allotment per State from $10,000 to $20,000. Hawaii was granted $5,000 for this purpose in 1935, and this sum was raised to $15,000 in 1939.

Grants for public health work, as provided by the original Social Security Act, amounted to $8 million annually, and were to be allotted to States on the basis of population, special health problems, and financial needs of the respective States. No matching requirement was included. The amount was raised to $11 million by the 1939 amendments, but the bases for apportionment were kept intact. The interpretation of these bases is discretionary under the law, and the percentage weighting of the three factors as well as the series used to reflect the latter two has varied from time to time. The Public Health Service issues annual regulations on the required amount of State-local matching of Federal funds.

Though by far the largest grant-in-aid programs of the thirties, whether emergency or permanent, dealt with the problems of unemployment, public works, welfare, and health, discussed above, there were numerous changes in or additions to the older, previously established grant-in-aid programs. These included vocational education, agricultural extension work, agricultural experiment stations and colleges of agriculture and mechanic arts, and a few new small programs created by Congress--farm forestry, wild-life restoration, and venereal disease control.

Other grant legislation of the 1930's.--The George-Ellzey Vocational Education Act of 1934 45/ made additional grants for agricultural,

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45/ 48 Stat. 792.

home economics, and trade and industrial subjects of $1 million for each category for each of the 3 years 1935-37. Grants for the first two were allocated on the same basis as those of 1929--farm population and rural population, respectively. The distinction made in that year in separating home economics allotments from the category of trade and industrial subjects was here carried one step further. Trade and industrial subjects were established as a separate category by this act, with allocations made on the basis of nonfarm population. Minimum allotments to a State for any one year were $5,000 for each category, and equal State-local matching of all funds was required.

The George-Deen Act of 1936 46/ authorized a permanent annual appropriation of more than $14 million for grants for vocational education. Allocations for agricultural, home economics, and trade and industrial subjects follow the pattern outlined above. In addition, grants were provided for courses in distributive occupational subjects and for the preparation of teachers for all aided subjects. These new grants were allocated on the basis of total population. Minimum allotments varied, depending on the size of the grant to be allocated. This act also carried with it a new type of matching provision, a "ratchet" provision designed to increase the States' share in the total program over the years by gradually increasing the percentage of Federal funds requiring matching. The act required that 50 percent of the Federal allocations (not including those for the two new grants which need not be matched) must be matched by State funds until June 30, 1942, 60 percent in the fiscal year 1943, 70 percent in 1944, 80 percent in 1945, 90 percent in 1946, and 100 percent thereafter.

The rural population base and matching requirement tradition of grants for agricultural extension work was modified by a 1935 47/ authorization of $1 million for one year for additional cooperative extension work and the employment of specialists in economics and marketing. These funds were to be allocated at the discretion of the Secretary of Agriculture, and no matching was called for. The Bankhead-Jones Act of 1935 48/ reverted to the lump-sum and population allocations, but this time farm population was used and the act again waived the matching requirement. The smaller authorization of 1939 49/ was another discretionary grant with no matching.

The allocation of grants for agricultural experiment stations, hitherto on a uniform lump-sum basis, was changed in the case of the additional grants authorized by the Bankhead-Jones Act. The new funds for "research into basic laws and principles relating to agriculture, especially methods of production, distribution, and extension of markets,"

46/ 49 Stat. 1488.
47/ 49 Stat. 252.
48/ 49 Stat. 438.
49/ 53 Stat. 589.

are allocated among States according to rural population, and equal State matching of these funds is required.

Similarly, the Bankhead-Jones Act broke the tradition of lump-sum allotments for grants for agriculture and mechanic art colleges. The additional funds authorized by this act included not only a $20,000 uniform lump-sum allotment to each State but also a considerable sum distributed according to total population. No matching was required, however.

Of the other grant legislation during the 1930's, grants for cooperative farm forestry 50/ were on a discretionary basis with no matching of funds required; additional funds for education of the blind 51/ followed the established formula; and grants for venereal disease control 52/ were to be made on the usual public health basis, substituting "the extent of the venereal disease problem" for the more general "extent of the special health problems" factor. Receipts from Federal taxes on firearms, shells, and cartridges were granted to States for wildlife restoration 53/ and allocated one-half according to area and one-half on the basis of the number of holders of paid hunting licenses in each State; the minimum allotment to any State was fixed at $15,000 a year, provided the State spends $5,000 from its own sources. One-third of the Federal allotment must be matched in full by State funds.

Grants During World War II

The emergency period of defense and war brought Federal aid to some new functions and some further changes in allocation and matching provisions as new grants were made to several of the established Federal-aid functions. Some of the peacetime functions were geared to wartime exigencies.

Vocational education grants, for example, were extended in 1940 to the training of defense workers. The first authorization of this nature 54/ was for courses of less than college grade in occupations essential to national defense. Grants to States were made in the amount of the cost of such courses, pursuant to plans approved by the Commissioner of Education, with the Federal Government bearing the main burden of financing them. Later authorizations extended the purposes to include engineering courses of college grade, courses for "designated rural and non-rural" youth, courses for youth on NYA, and equipment.55/

50/ 50 Stat. 188 (1937).
51/ 50 Stat. 744 (1937).
52/ 52 Stat. 439 (1938).
53/ 50 Stat. 917 (1937).
54/ 54 Stat. 632.
55/ 54 Stat. 1033 (1940).

Grants for marine schools were liberalized in 1941.56/ The Federal Government continued to match sums spent by States and municipalities, but the maximum grant was raised to $50,000. To receive the additional money (over the old maximum grant of $25,000) the schools must admit out-of-State students on terms prescribed by the Maritime Commission; the per capita costs of such students are paid from Federal funds.

As an agricultural parallel to these two training programs, grants were extended to States in 1943 to provide needed farm labor.57/ Grants were allocated on the basis of the Food Production and Distribution Administrator's determination of need and were funnelled through the agricultural extension services of the land grant colleges. No matching was required.

The Vocational Rehabilitation Act Amendments of 1943 58/ greatly expanded the program in amounts available for expenditure and in coverage and made special provision for war-disabled civilians. The population apportionments were abandoned at this time. The new grant formula was modelled somewhat on the public assistance basis of uniform Federal matching of State-local expenditures. The amount authorized yearly is such sum as shall be necessary. On the basis of State plans, the Federal Government pays to each State all the necessary cost, exclusive of administrative expenses, of payments to war-disabled civilians; one-half the cost of rehabilitation and medical examinations; one-half the cost of rehabilitation services for disabled persons, other than war-disabled civilians, who are needy; and 100 percent of the cost of proper and efficient administration of the plan. During the first 2 years, under the new law, if the Federal Security Administrator found that a State had "substantially exhausted" its funds available for these expenditures, he had power to increase the amounts payable to the State before July 1, 1945. Thus, the States were encouraged to establish and expand these services. These grants would appear, from the wording of the act to be open-end in that there is no dollar limit to the amount of Federal aid beyond the amount of approved local expenditures. The Comptroller General recently stated his opinion, however, that "there is no legal obligation on the Federal Government to make payments to the States unless and until the Congress makes money available for said purpose" and that when the amount thought to be necessary is yearly appropriated, it constitutes the total cost to the Federal Government for that year.59/ What the effect of the anti-deficiency laws and this opinion will be on this and other so-called open-end grant programs remains to be seen.

56/ 55 Stat. 607.
57/ 57 Stat. 70.
58/ 57 Stat. 374.
59/ Congressional Record - Senate, May 5, 1947, pp. 4620-4621.

Another emergency program was reestablished with the authorization in 1944 of additional funds for forest-fire prevention,60/ this time especially in critical areas of national importance. The grant was $1 million annually during the existing emergency, to be allocated at the discretion of the Secretary of Agriculture, with no State matching requirement.

The rest of the new wartime grants were for health and highways. One large new program not written into permanent law was that for emergency maternity and infant care. Because of the success of a demonstration program in Washington State, financed by the Children's Bureau, funds were authorized in 1943 for a Nation-wide program under a general appropriation act 61/ as an extension of the maternal and child health program under the Social Security Act. Originally for the care of wives and infants of enlisted men in the lowest four grades, it was extended for a 3 month period in 1943 to all enlisted men, including the three higher grades. The allocation of these funds among States was discretionary, and they were used to pay the entire cost of the services, within the limits per case set by regulation.

The Public Health Service Act 62/ of 1944 revised and extended the public health program and repealed title VI of the Social Security Act pertaining to public health. Grants covered by the new act are for general public health services and the prevention, treatment, and control of venereal diseases and tuberculosis. All three grants are allocated among States on the basis of (1) population; (2) the size of special health problems, the venereal disease problem, and the tuberculosis problem, respectively; and (3) financial need. State matching of Federal aid is determined by regulation rather than by statute. According to the Public Health Service regulations promulgated July 12, 1946,63/ the State is required to match at least 50 percent of the Federal grants for the general public health and venereal disease control programs and 100 percent of the Federal grant for the tuberculosis control program.

The Defense Highway Act of 1941,64/ authorizing aid for the construction, during the national emergency, of roads needed for national defense on the "strategic network" approved by the Secretary of War, made grants for five separate categories. Grants for highways and bridges on the strategic network were allocated half according to

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60/ 58 Stat. 736.
61/ 57 Stat. 28, 497, 589 (1943).
62/ 58 Stat. 693.
63/ 11 F.R. 7663.
64/ 55 Stat. 765.

section 21 with a maximum Federal share of 75 percent and half on a discretionary basis with no matching. Grants for engineering surveys on the strategic network were allocated on a discretionary basis and had to be matched equally by the States. Funds for access roads to military and defense establishments and for flight strips were also allocated on a discretionary basis, but no State matching was required for these.

Toward the end of hostilities, this act was followed by the Federal Highway Act of 1944 65/ for the postwar construction of highways and bridges, grade-crossing elimination, and the preparation of such plans. Grants amounting to one-half billion dollars a year for 3 successive postwar years were authorized to be matched in full by State-local funds. Some refinements made in the allocation formula represent a compromise between urban and rural interests. The "Section 21" formula is retained for the allocation of funds for Federal-aid interstate highways and is only slightly modified by the substitution of rural population for total population in the distribution of one-third of the funds for secondary and feeder roads. The more important innovation is in the appropriation for highways in urban areas; these funds are to be allocated among States on the basis of the population in urban areas of 5,000 or more in each State. Future Federal highway grant legislation will indicate whether the act of 1944 is a significant modification of the traditional formula of section 21, or a temporary compromise giving supplementary grants to urban areas for the alleviation of their present traffic problems.

A few months before the passage of the postwar highway act, advances to State and local governments for planning public works were authorized under the War Mobilization and Reconversion Act,66/. They were not ordinary grants-in-aid, but rather loans and advances, to be repaid if and when the actual construction was undertaken. They followed, however, an allotment procedure similar to that for some grants: 90 percent of sums appropriated were to be allotted according to population and 10 percent under the discretion of the Federal Works Administrator.

Grant Actions of the Seventy-ninth Congress

The Seventy-ninth Congress passed several major pieces of grant-in-aid legislation, and its committees gave consideration to a great many more. In addition, Congress gave much attention to bills proposing systems of equalization ("variable") grants and, although rejecting most of the far-reaching proposals for change in existing formulas, Congress enacted the first grant-in-aid law to spell out in detail an equalization formula (the School Lunch Act). Equalization formulas are

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65/ 58 Stat. 838.
66/ 58 Stat. 785 (1944).

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"variable" in that allocation and matching vary directly in accordance with need and inversely with fiscal ability.

New grant legislation in 1945 for agricultural extension work,[67] like the Bankhead-Jones Act of 1935, substituted farm population for the old rural population base for the allocation of the great bulk of the new funds.[68] A smaller sum of $500,000, however, is distributed on an entirely new set of factors: The allocation is based on "special needs due to population characteristics, area in relation to farm population, or other special problems," as determined by the Secretary of Agriculture. Not more than 10 percent of the sum shall be allotted to any one State for any one year. These discretionary allotments must be matched by an equal amount of State funds, while the others based on farm population need not be matched.

The Federal Airport Act [69] to provide Federal aid for the development of public airports extended grants to a new function. This program has much in common with that for highway aid, particularly with regard to financial arrangements. The act authorizes $500 million for a 7-year program; of each annual appropriation, 75 percent of the amount available for grants for projects within States must be apportioned among the States one-half according to population and one-half according to area. These amounts are available to pay the Federal share of approved projects, which shall be 50 percent of the allowable costs for class 3 or smaller airports and such portion, not exceeding 50 percent, as the Administrator of Civil Aeronautics may deem appropriate for class 4 or larger airports. The remaining 25 percent of the annual sum available for grants constitutes a discretionary fund that may be used to pay the Federal share in approved projects that the Administrator finds appropriate for carrying out the national airport plan regardless of the States in which they are located. These moneys may also be used to pay the Federal share for projects in national parks and recreation areas, national monuments, and national forests. The Federal share for projects in Alaska shall be not less than 50 percent for class 3 or smaller airports and not more than 75 percent in any case. There is also a public land provision similar to that in the highway program. Specifically, the maximum Federal share may be increased by whichever is smaller: (1) 25 percent, or (2) a percentage equal to one-half the percentage that the area of unappropriated and unreserved public lands and nontaxable Indian lands, where they exceed 5 percent of the area of the State, is of its total area.

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[67] 59 Stat. 231.

[68] $12 million, less 2 percent, by fiscal year 1948.

[69] Public Law 377, 79th Congress, 2d session, May 13, 1946.

The National School Lunch Act,70/ passed toward the end of the second session of the Seventy-ninth Congress, contains an equalization (or variable grant) formula in that the distribution of Federal funds varies directly with a State's need for the program and inversely with the ability of a State and its localities to finance the program. Furthermore, in the States that have per capita incomes below the national average, the required rate of non-Federal matching of Federal funds also varies directly with State fiscal ability.

Specifically, the funds available for grants are apportioned among the States in the proportion that each State's index of need is of the total of such indices. The index of need for each State is determined by multiplying the State's population aged 5 through 17 by the ratio of per capita income in the United States to per capita income in that State. Thus, the smaller the per capita income of the State the greater the weight applied to the school-age population.

The matching requirement in this act is another example of a "ratchet" provision, designed progressively to lessen the relative Federal share in the total program over the years. From 1947 through 1950, every Federal dollar must be matched by $1 from sources within the State; from 1951 through 1955, by $1.50; and thereafter, by $3. The matching required for a State whose per capita income is below that of the United States average is decreased by the percentage by which the State per capita income falls below that average.

The net result of the combined operation of the allotment formula and the variable matching is that the total funds per child from all sources will be progressively greater among successively lower-income States, if all States match in full their Federal allotments. Furthermore, for States below the national average in per capita income, the relative Federal share in the total program is progressively greater among successively lower-income States.

In July 1946 the Public Health Service Act was further amended by the inclusion of a section establishing grants for mental health and the treatment of psychiatric disorders.71/ Incorporated in the grant provision of the basic act is an additional $10 million authorized annually for this purpose, to be allocated according to population, the mental health problem in the respective States, and financial need.

70/ Public Law 396, 79th Congress, 2d session. June 4, 1946.

71/ The National Mental Health Act, Public Law 487, 79th Congress, 2d session. July 3, 1946.

The Labor Department-Federal Security Agency Appropriation Act 72/ for the fiscal year 1947 provided for the return to State control, on November 16, 1946, of the public employment offices and all their facilities. These services had been transferred by the States to the Federal Government on January 1, 1942, to promote the national war effort. The appropriation act suspended State matching of the Federal grants until July 1, 1948, when the State matching requirements of the Wagner-Peyser Act are to be effective again. The legislation also provided that payments to States may be in amounts necessary for the "proper and efficient administration" of public employment offices. The current basis used for these grants are estimates of work loads, time factors, and personal services.

The Vocational Education Act of 1946 73/ increased considerably the grants and minimum allotments authorized by the George-Deen Act in 1936 for vocational education in agricultural, home economics, trade and industrial, and distributive occupations subjects. The farm, rural, nonfarm, and total population, respectively, were the same as those in the previous act, except that apportionment and matching bases, the fifth category, the preparation of teachers of vocational subjects, was dropped as a separate item, and the grants of funds for the other four categories were liberalized to include this function.

The Social Security Act Amendments of 1946 74/ temporarily changed the basis for reimbursement of State expenditures for old-age assistance, aid to dependent children, and aid to the blind. For needy aged and blind, the Federal Government will, from October 1, 1946 through December 31, 1947, reimburse State expenditures (excluding all amounts in excess of $45 a month to any individual) to the amount of two-thirds of the first $15 of the average payment in the State multiplied by the number of recipients in the State, plus one-half the remaining amount, as well as one-half the total sums spent for the proper and efficient administration of the State plan. For aid to dependent children (excluding all amounts paid in excess of $24 a month for the first child and $15 for each subsequent child in the same home), Federal aid during those 5 quarters will equal two-thirds of the first $9 of the average payment multiplied by the number of dependent children, and one-half the remainder, as well as one-half the administrative expenditures.

After considering this legislation, the House Ways and Means Committee initially reported out a bill with equalization, or variable, Federal matching percentages.75/ The House Committee, however,

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72/ Public Law 549, 79th Congress, 2d session. July 26, 1946.
73/ Public Law 586, 79th Congress, 2d session. August 1, 1946.
74/ Public Law 719, 79th Congress, 2d session. August 10, 1946.
75/ H.R. 6911. See House of Representatives, Social Security Act Amendments of 1946, Reports Nos. 2447 and 2526, and Senate, Report No. 1862, 79th Congress, 2d session.

reconsidered and two weeks later reversed itself and reported out another bill that merely raised the Federal maximums while retaining 50-50 matching; the House approved this bill. The Senate accepted the report of its Finance Committee and amended the bill to include variable grants as originally reported to the House, but the conference committee compromised the differences by reporting out the fractional formula, in the form just outlined, which both houses accepted during the closing days of the session.

This act also amended title V of the Social Security Act by increasing substantially the grants authorized for the three maternal and child health and welfare programs administered by the Children's Bureau. The bulk of the increase was in the unmatched funds.

Among the last of the grant-in-aid programs approved by the President for the session was that for hospital surveys and construction.[76] The purpose of the act, which added a new title to the Public Health Service Act, is to enable States to inventory existing hospital facilities, survey the need for hospitals and health centers, and develop programs for construction, and finally, to assist the States in financing construction of hospitals in accordance with such programs over a 5-year period, fiscal years 1947 through 1951. State-by-State allotments for the making of surveys and plans are in proportion to population and, within its allotment, each State may receive one-third of its expenditures for this purpose.

The formula for the allocation of the construction grants is related to per capita income. Allocations are made on a variable basis, intended to reflect the differences both in State income and in the State's need for new hospital construction. The allotment to which each State is entitled is determined by multiplying its population by the square of its allotment percentage. The allotment percentage for any State, in turn, "shall be 100 per centum less that percentage which bears the same ratio to 50 per centum as the per capita income of such State bears to the per capita income of the continental United States (excluding Alaska), except that (1) the allotment percentage shall in no case be more than 75 per centum or less than 33 1/3 per centum, and (2) the allotment percentage for Alaska and Hawaii shall be 50 per centum each, and the allotment percentage for Puerto Rico shall be

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[76] Public Law 725, 79th Congress, 2d session. August 13, 1946.

75 per centum."[77] Each State's allotment is the proportion of the total to be allotted that its weighted population is of the sum of the weighted populations. The effect of this formula is to increase Federal grants, relatively, as State per capita income declines.

As passed originally by the Senate, S. 191 would have varied the Federal-State matching percentages in exactly the same way as the allotment percentages. In its final form, the matching provision requires from each State two non-Federal dollars for every dollar of Federal aid. This ratio results in progressively larger total funds per capita in the States as their relative per capita income declines, but it also requires a far greater effort on the part of the lower-income States in matching their Federal allotments. The allocation provision will tend to equalize hospital facilities, but the matching provision prevents equalization of State tax effort to support the program.[78]

The last Federal-aid act approved in 1946 was for agricultural research,[79] especially in marketing and distribution. Title I of the act provides for grants to State agricultural experiment stations. Of the funds authorized, 20 percent is to be divided equally among the States and territories, 52 percent is to be allocated one-half according to rural population and one-half according to farm population, and 25 percent constitutes a regional research fund from which the Secretary of Agriculture may make discretionary grants where two or more States have embarked on a cooperative program. All grants but those from the regional fund must be matched dollar for dollar by the States.

Despite the fact that the Seventy-ninth Congress did not enact the variable, or equalization, grants proposed for education, health, and welfare (except those for school lunches), more consideration and support were given to the equalization principle than ever before.

The first session of the Eightieth Congress took no grant-in-aid actions other than to extend the public assistance financing amendments of 1946 through June 30, 1950.[80] Extensive committee consideration was given, however, to S. 472, a bill for Federal aid to education, S. 545, a bill including grants for public health and medical care, and S. 1290 for school health services.

77/ Section 624. This is the same formula as that for matching percentages for public health and maternal and child health and welfare grants in the Wagner-Murray-Dingell bills of the 79th Congress, except that the minimum Federal percentage therein was 25 percent.

78/ Further analysis of these points may be found in chapter XIV and in table 30.

79/ Public Law 733, 79th Congress, 2d session, August 14, 1946.

80/ Public Law 379, August 6, 1947, 80th Congress, 1st session.

Table 5.--Estimated amount of grants by major allocation bases and matching requirements, 1946-47 1/

[Amounts in millions]

Basis of allocation	Total		No matching required	Matching required
	Amount	Percentage distribution		
Total	$1,237	100	$212	$1,024
Total, fixed ratio matching 2/	---	---	---	951
Total, matching varied according to fiscal ability 3/	---	---	---	73
State-local expenditures 4/	606	49	---	606
Population	186	15	30	156
Total	82	7	9	73
General 5/	95	8	21	74
Special 6/	8	1	0.1	8
Area and mileage 7/	146	11	7	139
Cost of service	130	12	125	5
"Need" and fiscal ability 8/	88	7	9	79
Discretion	41	3	23	18
Special problems 9/	25	2	6	19
Equal shares	15	1	12	4

1/ Based on estimated obligations for 1946-47 shown in the Budget of the United States Government for the fiscal year ending June 30, 1948.

2/ Includes all matching which treats all States on a par with one another.

3/ Matching ratio for each State varies with its relative fiscal ability, for example, school lunch program.

4/ Matching of these expenditures within certain maximum limits.

5/ For example, urban, rural, farm, nonfarm population, or other census category.

6/ Population aided, for example, number of blind in public institutions for their education, number of soldiers and sailors in State homes for disabled veterans, etc.

7/ Mileage includes rural delivery, Federal aid highway, railroad mileage.

8/ Allocation varies with a population measure and with State fiscal ability.

9/ For example, special health problems.

A summary of the relative importance of the various allocation and matching formulas being used today is shown in table 5. About 50 percent of all grants are distributed among States in relation to State and local expenditures. Another large share is allocated according to measures of need, such as population, area, mileage, and the cost of furnishing the aided services. Only a small part of total grants, about 7 percent, is allocated with some regard to relative State fiscal ability.

For every dollar of Federal aid which does not entail State and local matching, roughly $5 does so require. Of the matched grants, only one, that for school lunches, varies the ratio of State to Federal funds with the States' relative ability to raise these funds.

PART 2--CRITICAL ANALYSIS

CHAPTER V

DESCRIPTIVE CRITICISM OF THE PRESENT ALLOCATION OF GRANTS

The fourth chapter indicated the large number of existing grant programs and the variety of bases that have been used in distributing the grants. But as the Senate Committee on Education and Labor points out, "one Federal-aid program has been piled on top of another--without sufficient effort to appraise the general effect of Federal aid upon State and local activities or to achieve coordination among the innumerable Federal-aid programs."1/ This criticism is especially true of distribution policies.

How Shall the Present Methods of Allocation be Tested?

Perhaps no single criterion can be defended as the appropriate measure against which to test the allocation of Federal aid. A number of criteria have been suggested from time to time, some of which are considered below.

Taxes paid.--It has been suggested that Federal aid to a State should be directly related to the amount of Federal taxes paid from that State. The basic objection to this is that relating Federal grants to taxes paid rests on an inversion of the benefits-received principle of taxation. There may be cases where the original form of the benefit principle is valid, but no greater defense exists for the proposition that Federal expenditures should be made among States in accordance with the amounts of money collected from each State than for the personal corollary that the taxpayer should receive governmental services in proportion to the amount of taxes he pays. Furthermore, the Federal tax system is a national one, and it is somewhat artificial to attempt to trace its yield to "state of origin."

Federal grants are not in fact very well correlated with either Federal taxes paid or Federal tax incidence, by States. (See chart 1.) The most recent study of Federal tax collections and tax incidence by States is that for the year 1940, contained in the report of the Treasury Committee on Intergovernmental Fiscal Relations.2/ The per capita series on incidence and collections, when separately correlated

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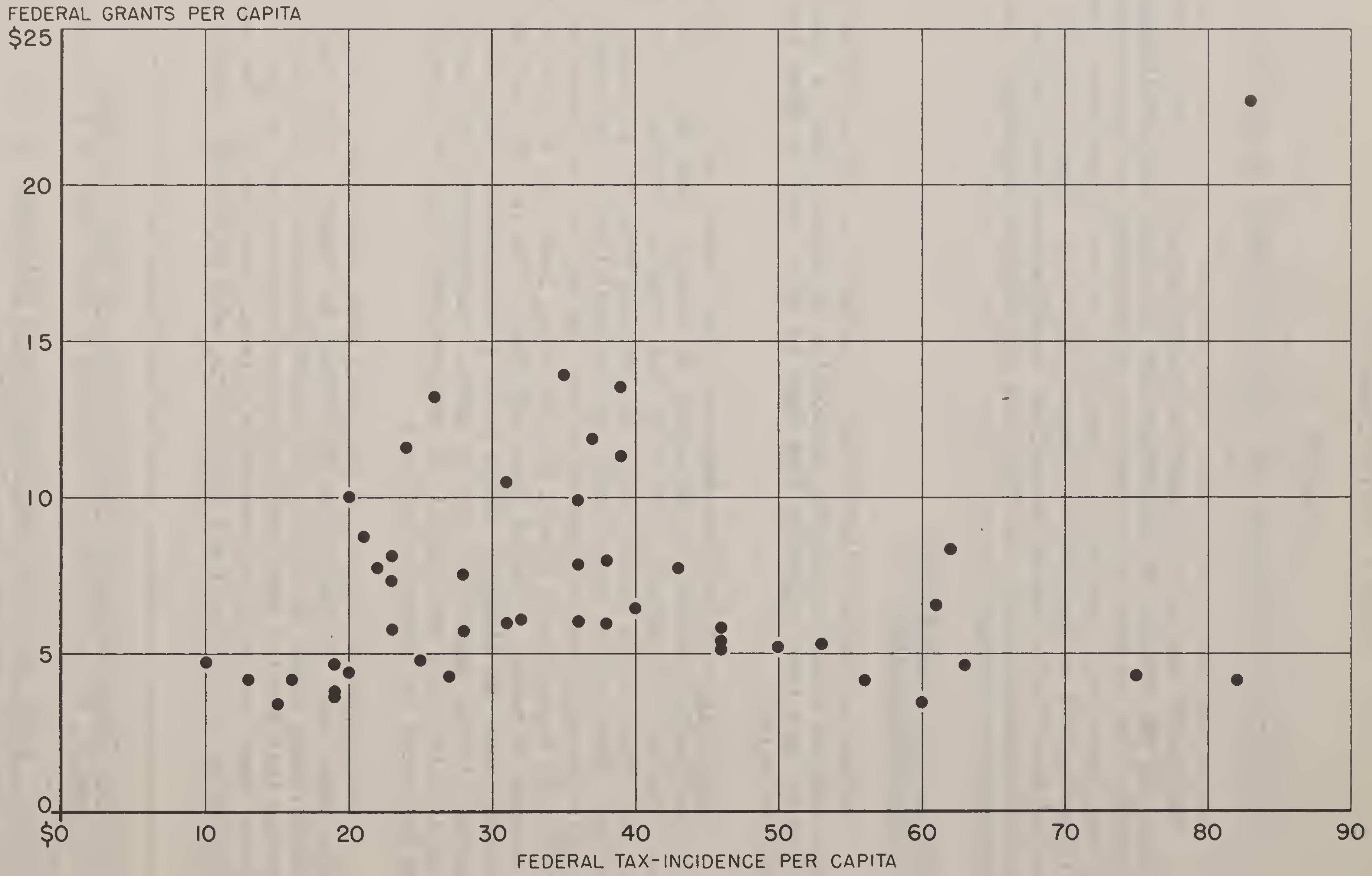
1/ Study and Investigation of Federal Grants to State and Local Governments, S. Rep. 1668, to accompany S. Res. 300, 79th Cong. 2d session.

2/ Federal, State and Local Government Fiscal Relations, S. Doc. 69, 78th Cong. 1st session, 1943, pp. 207-221.

CHART I.

RELATIONSHIP BETWEEN PER CAPITA FEDERAL TAX-INCIDENCE AND PER CAPITA FEDERAL GRANTS BY STATE 1/



1/ 1940 TAX-INCIDENCE DATA FROM FEDERAL, STATE, AND LOCAL GOVERNMENT FISCAL RELATIONS, S. DOC. NO. 69, 78TH CONGRESS, 1ST SESSION, P. 219. GRANT DATA, FISCAL YEAR 1942, ARE FROM TABLE 10 HEREIN. TAX-INCIDENCE FOR DELAWARE (NOT INCLUDED IN CHART) WAS COMPUTED TO BE $172 PER CAPITA AND FEDERAL AID $6.69 PER CAPITA.

with per capita Federal grants (all purposes, fiscal year 1942), yield correlation coefficients 3/ of approximately -.2. If these correlations are of any significance, they illustrate only a very slight tendency for Federal grants to vary inversely with ability to pay Federal taxes. They do not indicate that present Federal grants act in an orderly fashion to give most aid to those States least able to pay for governmental services, 4/ nor that Federal aids are distributed according to estimated "state of origin" of Federal taxes.

Per square mile.—Another test has to do with area. Highway and airport construction costs are partly correlated with area, for the obvious reason that transportation costs proportionately more as the distance between groups increases. But other grants have little if any reason to correlate with area. The 1941-42 Federal grants per square mile vary from $27.82 in Nevada to $3,468.33 in Massachusetts, and amount to $35,130.43 in the District of Columbia. Because grants are now at least indirectly related to population, any area measurement of present grants is substantially a reflection of the density of population, as these extreme items indicate and as table 6 illustrates.

State expenditures test.—A third test would relate Federal grants to the State-local expenditures for the aided function, assuming as a proper norm that aid should represent a reasonably uniform percentage of those expenditures in each State. Such a test can best be made for the year 1942 because the most recent complete data on State-local expenditures by function are available only for that year. Table 7 illustrates the results of such an analysis. While the expenditure data are not strictly comparable with the aid figures, and the resultant comparisons should not be interpreted too literally for any given State, the figures are generally representative of the facts.

Two conclusions as to the facts might be noted: (1) Federal aid is often a widely different percentage of expenditures for the same function among States with similar per capita incomes, both rich and poor; and (2) there is a slight tendency for the Federal aid to be a higher percentage of the expenditures among the lower-income States.5/

3/ Specifically, r = -.189 for Federal tax incidence and Federal grants, per capita (see chart 1); and r = -.205 for Federal grants and tax collections, per capita.

4/ For another treatment of this relationship, see Maxwell, James A., The Fiscal Impact of Federalism in the United States, Harvard University Press, 1946. pp. 396-403.

5/ See chart 2 for the income grouping of the States used in the analyses of the remainder of this chapter. The States are grouped on the basis of 1943-45 average per capita income for comparability in ranking, despite the fact that the other series used in the analysis may be for earlier years, such as 1940 or 1942. The "high-income" group consists of the 18 States (including D.C.) with above-average per capita income. For purposes of comparison, the low-income group is composed of an equal number (18) of the lowest income States, with the remaining 13 intermediate States constituting the middle-income group.

Table 6.—Population density and Federal grants per square mile 1/

States ranked by density of population	Density of population per square mile, 1940	Federal grants per square mile, 1941-42
U.S. average...........	44.2	$254.42
Nevada........................	1.0	27.82
Wyoming.......................	2.6	35.83
Montana.......................	3.8	41.61
New Mexico....................	4.4	33.77
Arizona.......................	4.4	50.72
Idaho.........................	6.3	66.73
Utah..........................	6.7	89.98
South Dakota..................	8.4	76.41
North Dakota..................	9.2	72.62
Colorado......................	10.8	144.60
Oregon........................	11.3	112.31
Nebraska......................	17.2	121.66
Kansas........................	21.9	156.51
Texas.........................	24.3	150.84
Washington....................	25.9	313.01
Maine.........................	27.3	161.79
Oklahoma......................	33.7	258.00
Minnesota.....................	34.9	253.72
Florida.......................	35.0	187.88
Arkansas......................	37.0	155.74
Vermont.......................	38.7	280.67
California....................	44.1	403.48
Iowa..........................	45.3	247.74
Mississippi...................	46.1	221.29
Louisiana.....................	52.3	253.39
Georgia.......................	53.4	208.42
New Hampshire.................	54.5	399.08
Missouri......................	54.6	330.30
Alabama.......................	55.5	193.96
Wisconsin.....................	57.3	332.91
South Carolina................	62.1	269.91
Virginia......................	67.1	311.55
Tennessee.....................	69.5	327.08
Kentucky......................	70.9	304.00
North Carolina................	72.7	245.56
West Virginia.................	79.0	442.12
Michigan......................	92.2	514.88
Indiana.......................	94.7	587.67
Delaware......................	134.7	911.52
Illinois......................	141.2	759.52
Ohio..........................	168.0	987.24
Maryland......................	184.2	770.63
Pennsylvania..................	219.8	1,119.52
New York......................	281.2	1,083.47
Connecticut...................	348.9	1,530.64
Massachusetts.................	545.9	3,468.33
New Jersey....................	553.1	1,872.13
Rhode Island..................	674.2	2,812.19
District of Columbia..........	10,870.3	35,130.43

1/ Density of population and State area data used are from the Statistical Abstract of the United States. Grants are for fiscal year 1942.

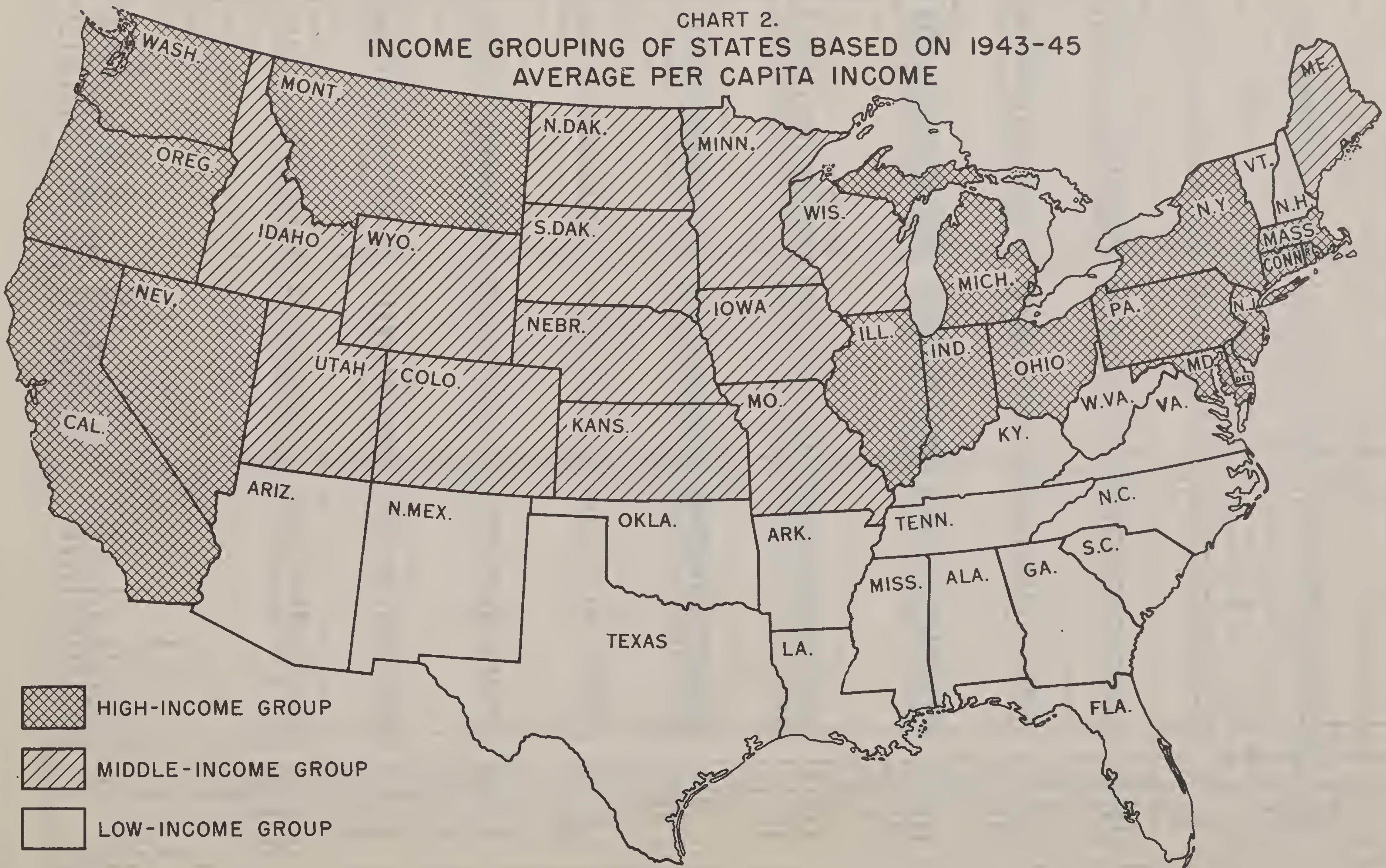
Table 7.—Federal grants as percent of State-local expenditures for certain functions, by State, 1941–42

States ranked by average 1943–45 per capita income	Federal grants (in thousands)				State-local expenditures (in thousands)				Federal aid as percent of State-local expenditures			
	Health, welfare, and security	Education	Public roads	Natural resources	Health, welfare, and security (operating)	Education (operating)	Public roads (operating and capital)	Natural resources (operating)	Health, welfare, and security	Education	Public roads (operating and capital)	Natural resources
Total	$460,828	$123,952	$153,712	$30,454	$1,797,262	$2,223,628	1/ $1,467,111	$139,241	25.6	5.6	10.5	21.9
High-income group	274,083	67,939	59,695	9,884	1,229,792	1,423,703	786,004	65,445	22.3	4.8	7.6	15.1
New York	34,513	11,347	7,032	822	307,460	342,077	138,193	8,021	11.2	3.3	5.1	10.2
Connecticut	4,899	1,394	1,106	268	28,881	39,929	26,058	1,744	17.0	3.5	4.2	15.4
California	47,261	9,956	5,739	1,073	150,218	169,631	82,007	14,780	31.5	5.9	7.0	7.3
Washington	15,939	2,616	1,920	870	41,884	38,067	22,168	3,038	38.1	6.9	8.7	28.6
Delaware	594	394	709	178	2,681	2,470	3,416	461	22.2	16.0	20.8	38.6
New Jersey	9,419	2,881	2,021	349	54,988	98,056	38,943	2,744	17.1	2.9	5.2	12.7
District of Columbia	1,477	287	660	---	10,133	11,357	5,954	---	14.6	2.5	11.1	---
Nevada	709	216	1,965	185	2,299	2,786	5,073	504	30.8	7.8	38.7	36.7
Illinois	31,684	5,482	4,861	810	114,708	134,031	66,437	5,006	27.6	4.1	7.3	16.2
Oregon	4,495	3,014	2,725	658	16,330	20,299	22,683	3,536	27.5	14.8	12.0	18.6
Massachusetts	22,697	3,564	2,085	292	99,402	81,772	37,220	2,053	22.8	4.4	5.6	14.2
Ohio	27,522	4,686	7,630	858	93,158	113,956	81,520	4,055	29.5	4.1	9.4	21.2
Michigan	18,584	6,119	4,350	921	89,803	99,226	64,803	5,235	20.7	6.2	6.7	17.6
Rhode Island	2,126	416	718	154	8,983	13,600	6,816	403	23.7	3.1	10.5	38.2
Maryland	4,435	1,485	1,888	343	18,248	25,524	19,851	1,898	24.3	5.8	9.5	18.1
Pennsylvania	31,481	9,963	8,298	1,009	136,963	160,251	111,264	6,893	23.0	6.2	7.5	14.6
Indiana	13,492	3,577	3,570	688	44,604	58,792	41,744	3,246	30.2	6.1	8.6	21.2
Montana	2,756	542	2,418	406	9,049	11,879	11,854	1,828	30.5	4.6	20.4	22.2
Middle-income group	84,517	17,363	38,657	6,909	284,666	356,543	281,139	30,554	29.7	4.9	13.8	22.6
Wisconsin	11,532	3,192	3,196	774	46,522	62,494	51,299	4,907	24.8	5.1	6.2	15.8
Kansas	6,474	1,725	4,116	562	22,059	32,953	26,090	2,599	29.3	5.2	15.8	21.6
Maine	3,094	828	1,119	333	11,361	12,751	11,580	2,035	27.2	6.5	9.7	16.4
Nebraska	5,222	848	2,824	503	14,483	20,615	17,729	1,679	36.1	4.1	15.9	30.0
North Dakota	2,091	409	2,236	396	7,212	12,185	9,589	891	29.0	3.4	23.3	44.4
Iowa	8,831	1,348	3,055	709	34,509	49,340	38,680	3,836	25.6	2.7	7.9	18.5
Utah	3,885	1,589	1,892	275	12,346	12,966	7,817	1,187	31.5	12.3	24.2	23.2
Wyoming	1,021	529	1,652	306	2,964	6,523	5,749	1,260	34.4	8.1	28.7	24.3
Colorado	10,827	1,523	2,274	450	29,485	20,620	13,943	1,746	36.7	7.4	16.3	25.8
Idaho	2,523	656	1,895	502	6,418	8,865	10,008	1,447	39.3	7.4	18.9	34.7
Missouri	14,090	2,480	5,593	850	46,571	48,418	31,284	2,490	30.3	5.1	17.9	34.1
Minnesota	12,412	1,818	6,267	833	43,217	56,140	46,681	5,487	28.7	3.2	13.4	15.2
South Dakota	2,515	418	2,538	416	7,519	12,673	10,690	990	33.4	3.3	23.7	42.0
Low-income group	102,228	38,650	55,360	13,661	282,804	443,382	398,547	43,250	36.1	8.7	13.9	31.6
Vermont	1,087	440	939	231	3,963	5,788	6,869	684	27.4	7.6	13.7	33.8
Florida	5,690	2,752	2,012	548	18,775	24,998	23,125	5,394	30.3	11.0	8.7	10.2
Texas	24,029	5,632	9,052	1,613	40,051	82,408	67,458	5,269	60.0	6.8	13.4	30.6
Arizona	3,019	579	1,821	358	8,131	8,311	8,272	1,164	37.1	7.0	22.0	30.8
New Hampshire	1,636	718	1,132	227	8,375	6,532	9,954	1,189	19.5	11.0	11.4	19.1
Virginia	3,585	2,330	6,028	773	15,420	31,895	33,785	2,874	23.2	7.3	17.8	26.9
Oklahoma	12,924	2,163	2,167	785	31,689	33,776	22,674	2,152	40.8	6.4	9.6	36.5
West Virginia	5,464	2,038	2,626	563	18,017	31,001	24,092	1,843	30.3	6.6	10.9	30.5
Louisiana	7,364	2,474	1,744	713	27,739	31,577	22,454	3,013	26.5	7.8	7.8	23.7
New Mexico	1,380	729	1,684	316	3,785	9,925	8,194	1,046	36.5	7.3	20.6	30.2
Tennessee	6,164	3,048	3,714	892	19,497	28,648	26,263	2,152	31.6	10.6	14.1	41.4
Georgia	5,918	2,804	2,539	1,010	18,420	29,097	23,873	2,339	32.1	9.6	10.6	43.2
Kentucky	4,991	2,240	4,174	875	15,110	29,001	26,417	1,881	33.0	7.7	15.8	46.5
North Carolina	5,998	2,348	3,420	1,178	17,393	13,208	25,451	3,283	34.5	17.8	13.4	35.9
Alabama	3,324	2,658	3,045	983	9,918	26,642	21,134	2,864	33.5	10.0	14.4	34.3
South Carolina	2,980	1,633	3,019	750	10,025	21,400	19,169	1,979	29.7	7.6	15.7	37.9
Arkansas	3,480	1,555	2,344	891	8,192	13,806	9,493	1,901	42.5	11.3	24.7	46.9
Mississippi	3,195	2,509	3,900	955	8,304	15,369	19,870	2,223	38.5	16.3	19.6	43.0

1/ Includes $1,421,000 estimated by the Bureau of Census but not allocated.

CHART 2.

INCOME GROUPING OF STATES BASED ON 1943-45 AVERAGE PER CAPITA INCOME



The latter conclusion should be considered in additional relationship to the effort that the low-income States are making to support these functions. (See table 8.) For example, State and local governments in the low-income States expended about 0.9 percent of their income payments (average 1941-42) for highway purposes in fiscal 1942, whereas the high-income States expended but about 0.6 percent during the period. Similarly, in support for education, 22 of the 31 below-average income States made above-average effort, whereas only 3 of the 18 upper-income States expended an above-average percent of their income payments on schools. Much the same is true in the assistance field, as will be shown in greater detail below. (N.B.: The same percent of effort, as defined here, yields successively greater amounts of funds per capita in successively-higher-income States.) That Federal aid is a greater percentage of the total expenditures in the low-income States is a situation which exists in spite of relatively high effort to support these functions, and not, as sometimes charged, because such States do not sufficiently exert themselves to perform governmental services.

It would be fallacious to conclude that the present distribution of grants-in-aid is faulty to the extent that it varies from a uniform percentage of State expenditures on a given function. Such a conclusion would take no account of the need for the service, nor of the ability to support the service.

The Basic Test

The basic principle against which to measure the allocation of aid, and test its validity, is that grants from the central government should be directly related to the extent of the need of the receiving units for the government service to be aided, and inversely related to the extent of their ability to pay for the service.

Analytical Tests Use Population to Measure Need

Because most aided services deal with some or all classes of the population, and because the costs of administering the services tend to vary directly according to the size of the group served, it is reasonable to assume that the extent of need is in most cases a direct function of the number of persons the government service is expected to serve. Other modifications are discussed below, in chapter VIII.

Although governmental services are usually thought of as being available to the entire population, many general services are obviously intended for certain special groups. There are many groups, such as the aged and blind, that are receiving specific governmental attention through the medium of Federal grants-in-aid. In making grants for service to these special groups, there has been a considerable tendency to relate the grant to the "number at risk"—the numerical size of the group potentially eligible for service—if not to the actual number served. In vocational education, for example, the relative numbers of

Table 8.--Comparison of average effort 1/ for various functions by States in different income groups, 1941-42

[As percentage of income payments]

Function	U.S. average	Income groups		
		High	Middle	Low
Number of States in each group	49	18	13	18
Total	6.940	6.802	8.207	6.572
Function:				
Public welfare	1.177	1.183	1.564	.905
Public assistance, incl. general.	.595	.618	.750	.414
Public assistance, excl. general.	.383	.356	.556	.359
Highways	.772	.649	1.167	.927
Schools	2.148	2.051	2.627	2.159
General control and safety	1.431	1.493	1.311	1.302
Health, hospitals, and sanitation	.740	.796	.675	.597

1/ State and local operating expenditures 1941-42 as a percent of income payments (average 1941 and 1942). Expenditures for highways, however, include capital outlays.

rural persons determine the amount of grants for home economics, and the size of the nonfarm population determines the grants for trade and industrial subjects.

Considered alone, these special population measures, assuming that they do correctly measure the need for the service, are proper measures of need, and each grant program might be appraised separately to determine whether or not the grant is properly related to the need for the service it is designed to support.

In an appraisal of the total effectiveness of all grants-in-aid, and in a comparison of different types of grants, however, one is forced to seek a generalized measure of need, and total population seems best adapted to that purpose.6/ In most cases the number of persons in each special group eligible for an aided service will correlate roughly with total population, by States, so that among grants dependent on population series, differences among programs may tend to offset one another. If so, total allotments to any given State are probably not much greater when each specific grant is based on special population measures than would have obtained if total population had been used for all programs combined.

Analytical Use of Measures of Fiscal Ability*

During the past several years the Department of Commerce has developed and improved its estimates, by State, of income payments, and of per capita incomes. For many years, students of grants-in-aid have been interested in the use of such series to measure comparative fiscal abilities among States.7/ Income payments as a measure of relative fiscal ability are used by the Surgeon General, by law, in allotting hospital construction aids, and, by regulation, in allotting aids for public health work; by the Secretary of Agriculture, as required by law, in administering the school-lunch program; and by the Commissioner for Social Security (and before him, the Secretary of Labor), by regulation, in allocating Children's Bureau grants-in-aid. These actions represent official acceptances of the State income series as a fair measure of economic ability and thus of potential fiscal ability.

6/ See discussion in Elements of a Variable Grants Formula, by Paul H. Wueller, Bureau Memorandum No. 54, Bureau of Research and Statistics, Social Security Board, November 1943.

7/ See The Fiscal Capacity of the States—A Source Book, Bureau Memorandum No. 29, and the Third Edition, Bureau Memorandum No. 43, January 1941.

* For a more complete discussion of measurement of fiscal ability, see chapter IX of the present document.

Table 9.--Federal grants to States, per capita, by purpose and State, fiscal year 1945-46 1/

States ranked by 1943-45 per capita income	All grants	Grants for social security and related programs				Education	Public roads	Development and conservation of natural resources
		Total	Assistance payments and administration	Employment security administration	Health and welfare services			
Total....................	$5.63	$4.54	$3.18	$0.42	$1.00	$0.25	$0.55	$0.28
Continental United States.	5.68	4.60	3.19	.42	.99	.26	.55	.28
High-income group...............	5.30	4.56	3.17	.57	.82	.20	.37	.17
New York..............	4.17	3.72	2.22	.70	.80	.18	.21	.07
Connecticut....................	4.22	3.59	2.04	.59	.96	.25	.21	.17
California.....................	7.09	6.06	4.42	.71	.93	.20	.66	.17
Washington.....................	10.15	8.24	6.53	.63	1.08	.32	1.07	.52
Delaware.......................	5.45	3.12	.76	.61	1.75	.75	.95	.63
New Jersey.....................	2.95	2.46	1.14	.63	.70	.15	.25	.10
District of Columbia..........	2.09	1.99	.77	.33	.89	.05	.04	---
Nevada.........................	13.18	5.10	2.93	.93	1.25	1.07	5.78	1.23
Illinois.......................	5.84	5.39	4.06	.49	.84	.17	.16	.11
Oregon.........................	8.54	5.81	4.15	.60	1.06	.37	1.40	.96
Massachusetts..................	6.14	5.71	4.43	.49	.80	.16	.20	.07
Ohio...........................	5.46	4.81	3.55	.48	.78	.17	.32	.15
Michigan.......................	6.20	5.39	3.71	.74	.94	.20	.40	.22
Rhode Island...................	4.47	3.87	2.48	.53	.87	.24	.14	.22
Maryland.......................	3.63	2.58	1.37	.39	.81	.23	.61	.21
Pennsylvania...................	3.79	3.28	2.35	.43	.50	.20	.18	.13
Indiana........................	5.15	4.37	3.06	.39	.91	.21	.34	.23
Montana........................	11.35	6.76	5.18	.40	1.18	.68	3.01	.89
Middle-income group............	7.13	5.70	4.46	.26	.98	.34	.66	.42
Wisconsin......................	5.17	4.42	3.30	.26	.86	.28	.13	.34
Kansas.........................	5.59	4.49	3.29	.30	.90	.26	.46	.37
Maine..........................	6.59	5.31	3.91	.37	1.03	.45	.34	.50
Nebraska.......................	7.54	5.09	4.02	.14	.93	.36	1.62	.46
North Dakota...................	10.02	4.70	3.45	.17	1.08	1.00	3.47	.85
Iowa...........................	5.91	5.20	4.15	.12	.93	.25	.10	.36
Utah...........................	9.48	7.10	5.27	.43	1.40	.47	1.39	.53
Wyoming........................	11.87	4.91	3.15	.41	1.35	1.04	4.79	1.13
Colorado.......................	11.22	9.67	8.42	.22	1.02	.46	.69	.40
Idaho..........................	9.35	5.78	4.04	.37	1.37	.66	1.94	.97
Missouri.......................	7.75	6.74	5.55	.33	.87	.25	.47	.29
Minnesota......................	6.78	5.70	4.31	.27	1.12	.26	.41	.41
South Dakota...................	7.09	5.07	3.89	.12	1.05	.56	.68	.79
Low-income group...............	5.71	4.18	2.64	.23	1.31	.32	.80	.40
Vermont........................	7.20	4.91	2.88	.48	1.55	.73	.70	.86
Florida........................	6.45	5.48	4.08	.21	1.20	.21	.46	.29
Texas..........................	6.61	5.25	3.91	.21	1.14	.29	.79	.27
Arizona........................	8.33	5.75	4.14	.36	1.25	.39	1.76	.44
New Hampshire..................	6.39	4.61	3.08	.49	1.04	.47	.76	.55
Virginia.......................	2.89	1.85	.72	.18	.94	.26	.46	.33
Oklahoma.......................	14.31	11.75	10.15	.25	1.35	.36	1.76	.43
West Virginia..................	5.10	3.42	1.81	.33	1.28	.26	1.01	.42
Louisiana......................	5.86	4.39	2.73	.31	1.35	.33	.76	.38
New Mexico.....................	9.95	4.66	3.03	.26	1.37	.42	4.23	.63
Tennessee......................	5.31	3.55	1.98	.25	1.31	.29	1.10	.38
Georgia........................	5.26	3.68	1.84	.25	1.59	.32	.86	.40
Kentucky.......................	4.09	2.96	1.57	.18	1.22	.30	.42	.41
North Carolina.................	3.86	2.75	1.12	.19	1.44	.30	.39	.42
Alabama........................	4.80	3.05	1.52	.21	1.32	.28	1.02	.45
South Carolina.................	5.25	3.59	1.53	.16	1.90	.40	.74	.52
Arkansas.......................	5.14	3.54	1.88	.27	1.38	.45	.57	.58
Mississippi....................	4.19	3.06	1.53	.15	1.39	.39	.16	.58
Territories and possessions......	2.95	1.59	1.12	.33	1.30	.24	.83	.30
Alaska.........................	9.48	7.53	2.92	1.15	3.45	.80	.10	1.06
Hawaii.........................	7.66	2.47	.81	.18	1.48	.40	4.23	.56
Puerto Rico....................	1.67	1.16	---	---	1.16	.18	.11	.22
Virgin Islands.................	2.10	2.10	---	---	2.10	---	---	---

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1/ Based on table 4. Population as of July 1, 1945.

Application of Valid Tests

In the analysis that follows, therefore, it is assumed that a judgment as to the over-all effectiveness and equity of the present allocation of Federal aids can be derived from an examination of the aid given to the various States in relation to their population and their income payments.

Relation to population.—Some conclusions can be drawn from the per capita figures alone. Table 9 contains the fiscal 1946 analysis, by function, of major Federal aids 8/ on a per capita basis and a somewhat more detailed analysis of the grants for social security and related purposes. Table 10 presents similar data for the fiscal year 1942.

Total grants to States averaged $5.63 per capita for the Nation as a whole in 1945-46. Among States, however, they varied from $2.09 for the District of Columbia to $14.31 for Oklahoma. Much of this range grew out of the financial provisions for public assistance grants, the allocation of which is controlled by the size of State-local expenditures. These grants, while averaging $3.18 per capita for the States and Territories in 1945-46, ranged from $0.72 in Virginia to $10.15 in Oklahoma. In addition, per capita aid was particularly high in the public-land States, primarily because of the lump-sum and minimum apportionments and the nature of the highway allocation formula. For highway aid alone, Federal grants ranged from $0.04 per capita in the District of Columbia and $0.10 in Iowa to a high of $5.78 in Nevada. For other functions, the ranges in per capita aid were not quite so striking, though certain tendencies may be seen when per capita aid is considered together with fiscal ability. Per capita aid figures taken alone indicate that, to the extent that population is a measure of need, Federal aid as a whole has not been distributed in very close accord with need.

Relation to income payments.—The allocation of Federal grants may be tested further by relating them to income payments. Looking first at the proportions that total grants to States assume in relation to total State income payments (table 11), it may be seen that grants to States have exhibited a slight inverse relationship to income payments; they have borne a somewhat larger ratio to income payments in the low-income States. Grants in 1945-46 amounted to 0.49 percent of 1945 income payments in the continental United States—0.39 percent in the high-income group of States, 0.65 percent in the middle-income group,

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8/ See Social Security Bulletin, June 1946, p. 43, for a similar analysis of 1944-45 grants to States.

Table 10.--Per capita Federal grants to States, by function, fiscal year 1941-42

States ranked by average 1943-45 per capita income	All grants	Grants for social security and related programs				Education	Public roads	Development and conservation of natural resources
		Total	Assistance payments and administration	Employment security administration	Health and welfare services			
Total....................	$5.70	$3.39	$2.75	$0.39	$0.25	$0.92	$1.16	$0.23
Continental United States.	5.75	3.44	2.79	.40	.25	.93	1.15	.23
High-income group...............	5.69	3.79	3.10	.50	.19	.94	.83	.14
New York....................	4.14	2.66	1.97	.55	.14	.87	.54	.06
Connecticut..................	4.29	2.74	1.92	.58	.24	.78	.62	.15
California...................	8.35	6.17	5.42	.54	.20	1.30	.75	.14
Washington...................	11.32	8.45	7.69	.55	.21	1.39	1.02	.46
Delaware.....................	6.69	2.12	1.09	.67	.36	1.41	2.53	.64
New Jersey...................	3.43	2.20	1.43	.60	.17	.67	.47	.08
District of Columbia..........	2.80	1.70	1.02	.36	.32	.33	.76	---
Nevada.......................	22.69	5.23	3.23	1.15	.86	1.59	14.50	1.37
Illinois.....................	5.33	3.94	3.29	.46	.19	.68	.60	.10
Oregon.......................	9.93	4.10	3.14	.67	.29	2.75	2.48	.60
Massachusetts................	6.58	5.22	4.47	.57	.17	.82	.48	.07
Ohio.........................	5.85	3.96	3.36	.42	.18	.67	1.10	.12
Michigan.....................	5.42	3.36	2.67	.50	.18	1.11	.79	.17
Rhode Island.................	4.64	2.89	1.90	.71	.29	.57	.98	.21
Maryland.....................	4.12	2.24	1.65	.34	.26	.75	.96	.17
Pennsylvania.................	5.22	3.24	2.60	.45	.19	1.02	.85	.10
Indiana......................	6.11	3.86	3.23	.41	.22	1.02	1.02	.20
Montana......................	11.89	5.35	4.44	.47	.44	1.05	4.69	.79
Middle-income group.............	7.58	4.35	3.74	.33	.27	.89	1.99	.36
Wisconsin....................	5.99	3.69	3.20	.28	.22	1.02	1.02	.25
Kansas.......................	7.34	3.69	3.20	.22	.27	.98	2.35	.32
Maine........................	6.48	3.73	3.05	.41	.27	1.00	1.35	.40
Nebraska.....................	7.56	4.20	3.64	.25	.31	.68	2.27	.40
North Dakota.................	8.77	3.57	2.85	.29	.43	.70	3.82	.68
Iowa.........................	5.74	3.64	3.16	.21	.26	.56	1.26	.29
Utah.........................	13.23	6.73	5.88	.48	.37	2.75	3.28	.48
Wyoming......................	13.95	4.06	2.95	.54	.57	2.10	6.57	1.22
Colorado.....................	13.57	9.75	9.13	.30	.32	1.37	2.05	.41
Idaho........................	11.62	5.26	4.27	.49	.49	1.37	3.95	1.05
Missouri.....................	6.05	3.71	3.05	.43	.22	.65	1.47	.22
Minnesota....................	8.00	4.65	4.01	.40	.24	.68	2.35	.31
South Dakota.................	10.04	4.29	3.63	.23	.43	.71	4.33	.71
Low-income group................	4.99	2.43	1.84	.26	.34	.92	1.32	.33
Vermont......................	7.89	3.18	2.11	.54	.53	1.29	2.75	.68
Florida......................	5.14	2.66	2.05	.29	.32	1.29	.94	.26
Texas........................	6.00	3.58	3.07	.25	.26	.84	1.35	.24
Arizona......................	10.50	5.49	4.69	.32	.47	1.05	3.31	.65
New Hampshire................	7.72	3.40	2.53	.53	.34	1.49	2.35	.47
Virginia.....................	4.29	1.21	.69	.23	.28	.79	2.03	.26
Oklahoma.....................	8.13	5.83	5.25	.25	.32	.98	.98	.35
West Virginia................	5.81	2.97	2.37	.31	.28	1.11	1.43	.31
Louisiana....................	4.81	2.88	2.32	.25	.31	.97	.68	.28
New Mexico...................	7.77	2.61	1.72	.29	.60	1.38	3.18	.60
Tennessee....................	4.69	2.09	1.51	.27	.32	1.03	1.26	.30
Georgia......................	3.81	1.84	1.22	.25	.37	.87	.79	.31
Kentucky.....................	4.40	1.79	1.20	.24	.36	.80	1.50	.31
North Carolina...............	3.63	1.68	1.09	.24	.35	.66	.96	.33
Alabama......................	3.40	1.13	.56	.19	.38	.90	1.03	.33
South Carolina...............	4.19	1.49	.86	.23	.40	.82	1.51	.37
Arkansas.....................	4.18	1.76	1.01	.36	.38	.79	1.18	.45
Mississippi..................	4.73	1.43	.87	.17	.40	1.12	1.75	.43
Territories and possessions......	3.26	.88	1.39	.39	.51	.66	1.74	.26
Alaska.......................	43.82	6.58	3.89	.95	1.74	.69	35.23	1.32
Hawaii.......................	3.70	1.67	.92	.28	.47	.67	.88	.47
Panama.......................	13.08	---	---	---	---	---	13.08	---
Puerto Rico..................	1.48	.44	---	---	.44	.60	.29	.15
Virgin Islands...............	.80	.28	---	---	.28	.52	---	---

Table 11.—Federal grants in fiscal year 1945-46 in relation to income payments, by State

States ranked by average 1943-45 per capita income	Federal grants as percent of 1945 income payments 1/	Average per capita income, 1943-45 2/	Per capita grants 3/
(1)	(2)	(3)	(4)
Continental United States......	0.49	$1,108	$5.68
High-income group....................	.39	---	5.30
New York...........................	.26	1,489	4.17
Connecticut........................	.29	1,480	4.22
California.........................	.48	1,473	7.09
Washington.........................	.71	1,441	10.15
Delaware...........................	.39	1,371	5.45
New Jersey.........................	.21	1,360	2.95
District of Columbia...............	.15	1,313	2.09
Nevada.............................	1.07	1,302	13.18
Illinois...........................	.43	1,299	5.84
Oregon.............................	.66	1,276	8.54
Massachusetts......................	.46	1,271	6.14
Ohio...............................	.42	1,266	5.46
Michigan...........................	.51	1,260	6.20
Rhode Island.......................	.36	1,258	4.47
Maryland...........................	.29	1,222	3.63
Pennsylvania.......................	.31	1,149	3.79
Indiana............................	.44	1,136	5.15
Montana............................	.96	1,133	11.35
Middle-income group..................	.65	---	7.13
Wisconsin..........................	.44	1,091	5.17
Kansas.............................	.50	1,080	5.59
Maine..............................	.62	1,055	6.59
Nebraska...........................	.67	1,051	7.54
North Dakota.......................	.89	1,051	10.02
Iowa...............................	.53	1,044	5.91
Utah...............................	.91	1,028	9.48
Wyoming............................	1.07	1,027	11.87
Colorado...........................	1.02	1,025	11.22
Idaho..............................	.91	1,008	9.35
Missouri...........................	.72	991	7.75
Minnesota..........................	.64	981	6.78
South Dakota.......................	.66	966	7.09
Low-income group.....................	.71	---	5.71
Vermont............................	.70	958	7.20
Florida............................	.64	942	6.45
Texas..............................	.72	894	6.61
Arizona............................	.90	891	8.33
New Hampshire......................	.65	891	6.39
Virginia...........................	.32	875	2.89
Oklahoma...........................	1.60	826	14.31
West Virginia......................	.60	776	5.10
Louisiana..........................	.75	765	5.86
New Mexico.........................	1.24	755	9.55
Tennessee..........................	.65	747	5.31
Georgia............................	.71	710	5.26
Kentucky...........................	.55	683	4.09
North Carolina.....................	.52	681	3.86
Alabama............................	.68	660	4.80
South Carolina.....................	.79	630	5.25
Arkansas...........................	.78	597	5.14
Mississippi........................	.75	527	4.19

1/ Federal grants data from table 4, p. 11. Income payments data for 1945 from August 1946 Survey of Current Business.

2/ Per capita figures for these 3 years from August 1946 Survey of Current Business.

3/ From table 9, p. 68.

and 0.71 percent in the low-income group. These data show that grants currently are still very small in relation to income payments—less than 3/4 of 1 percent in most cases.9/

Relating the grants received by individual States to total income payments gives initially an impression of fairly equitable treatment, at least among the lower two-thirds of the States. But the aggregate amounts of both income and Federal aid vary according to the number of persons in the State. Only by converting the amounts to a per capita basis can the more significant State by State variations be clearly seen, and the disparities be highlighted (columns 3 and 4 of table 11). When this done, a tendency for per capita Federal aid for all purposes to correlate with per capita income may be observed, especially among the low-income States. Because the dispersion of per capita grants is much greater among the upper-income States than in the other two groups, there seems to be no particularly significant tendency for this group.

A closer study of per capita grant data for the 21 lowest-income States discloses a tendency for per capita income (1943-45 average) and per capita aid (1945-46) to rise or fall together (see chart 3). For 18 of the 21 States having per capita income below $1,000, the coefficient of correlation between the two series is .86. Data for New Mexico, Oklahoma, and Virginia were excluded from this calculation and from the determination of the trend line shown on chart 3, since they were so clearly divergent from the main trend.

Such a tendency is at variance with the basic principle set forth earlier and deserves closer scrutiny. The tendency in 1945-46 was especially acute among open-end grants, such as those for public assistance—as will be discussed at greater length below.

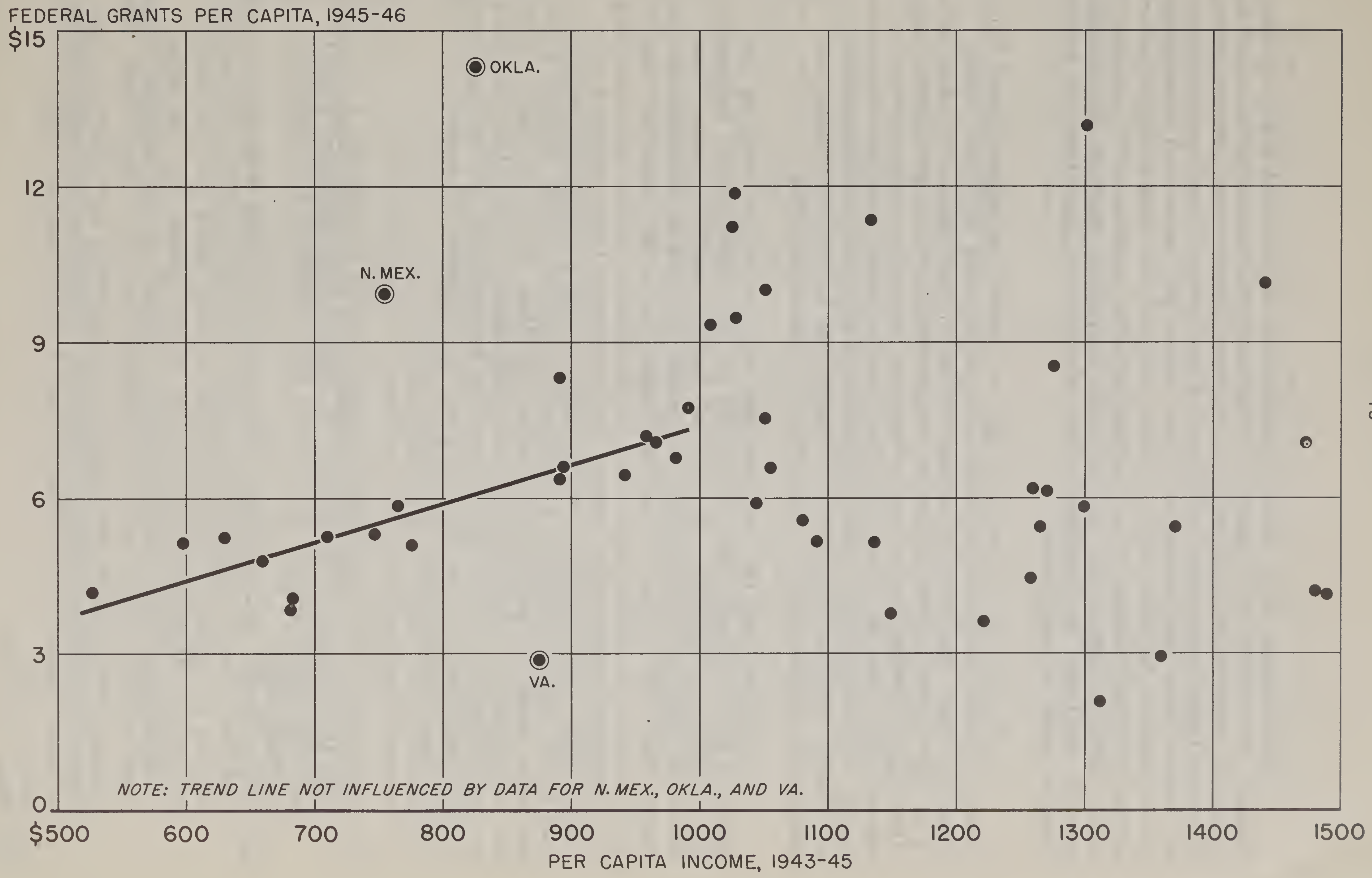
Effect of Matching

Thus far in this chapter, present Federal aid allocations have been analyzed with no regard to matching requirements. These requirements are of great importance in determining the total effectiveness of any Federal-State program. They must be considered, together with the nature of the allocation of funds, in determining whether need is met equitably and the tax burden falls equitably, State by State.

9/ This fact weakens one criticism sometimes leveled against the use of income payments in making Federal grants--that the income measures already include Federal grant payments. These grant amounts are, at best, a relatively small proportion of income payments and, furthermore, the relative differences in these proportions as among States are not sufficiently large to cause concern from this point of view.

CHART 3.

TOTAL PER CAPITA FEDERAL GRANTS IN RELATION TO PER CAPITA INCOME



For example, if a State program is to be financed fully by the Federal Government, the equalization principle is achieved in practice if aid is distributed solely in accordance with the need for the service. If Federal aid is to cover only part of the cost of the State program but there is no requirement as to the amount of State-local expenditures, the allocation formula should contain both the need and ability factors within it if any degree of equalization in the program level and tax burden is to be achieved. In the third situation, when State matching also is required, the combined effect of both the allocation and matching formulas must be considered.

V. O. Key, in his analysis 10/ of State-local expenditures for federally-aided programs in relation to variations in State fiscal capacity found that "the percentage which the per capita matching quota is of per capita income in general tends to decline as per capita income rises."11/ Certain States scattered over the entire range diverge considerably from this tendency; for the most part, they are among the States with the smallest total populations and are the most sparsely populated. This divergence is generally due to lump-sum, area, and mileage allotments and the requirement of equal matching.

Key found that the range in the relative effort required for matching was striking: the proportion of per capita income required of the 6 lowest-income States was 5 times that of the 6 highest-income States in 1940.12/ Furthermore, he presented data to substantiate the theory "that the higher per capita income States were much less near to the margin of income that could be diverted to public purposes than the low-income States and, hence, could increase their revenues more readily."13/ This supposition was borne out by a comparison which he made of per capita matching expenditures required of the States, first excluding those for public assistance, and then including them. After the inclusion of public assistance expenditures, the relative increase in total State-local per capita matching expenditures was smaller among successively lower-income States, i.e., the increase in matching expenditures declines with per capita income.

10/ Key, V. O., Jr. The Matching Requirement in Federal Grant Legislation in Relation to Variations in State Fiscal Capacity, Social Security Board, Bureau of Research and Statistics Memorandum No. 46, February 1942.

11/ Ibid., p. 14. Mr. Key based this analysis on both "the amounts which each State would have had to furnish from State and local funds to receive all grants offered to it on a 50-50 basis for the Federal fiscal year 1940 with the exception of the grants for the three categories of public assistance" (pp. 13-14) and the amounts actually spent to match grants with the exception of public assistance. Per capita income figures were based on the average for 1938-40. The inverse correlation between income and percentage of income needed to match Federal aid is clearly seen from his charts 4 and 5.

12/ Ibid., p. 18.

13/ Ibid., p. 42 ff.

These findings led Key to conclude that among the foremost consequences of the "differential weight" of matching are that States with low per capita income might divert funds from unaided functions in order to take full advantage of newly proffered Federal funds, or might neglect to expand unaided services at the pace of the more prosperous States, or carry a heavier tax burden than other States in order to finance aided and unaided activities. These findings are of great significance since matching requirements are so commonly used today. As demonstrated in table 5, matched grants currently constitute over 80 percent of total grants, "variable" matching making up but a small part of this percentage.

Effect of Open-End Grants

Whereas the usual type of matched grant is a fixed total sum allocated among States in accordance with a certain formula and matched on a 50-50 basis, if the grant is open-end, the Federal Government reimburses a uniform percentage of whatever amount may be spent by the States, under certain conditions. The distribution of Federal funds under such an arrangement does not have the same direct tendency to fix the level of the program, in each State, as does the allocation of a fixed amount of Federal funds. Rather, State action with regard to how much it can and does put up is the determinant of both the amount of Federal aid and of program levels. Open-end grants, on an equal matching basis are, instead, greatly affected by differences in fiscal ability among States. This tendency is illustrated in the following analysis of public assistance grants--the most significant example of such grants.

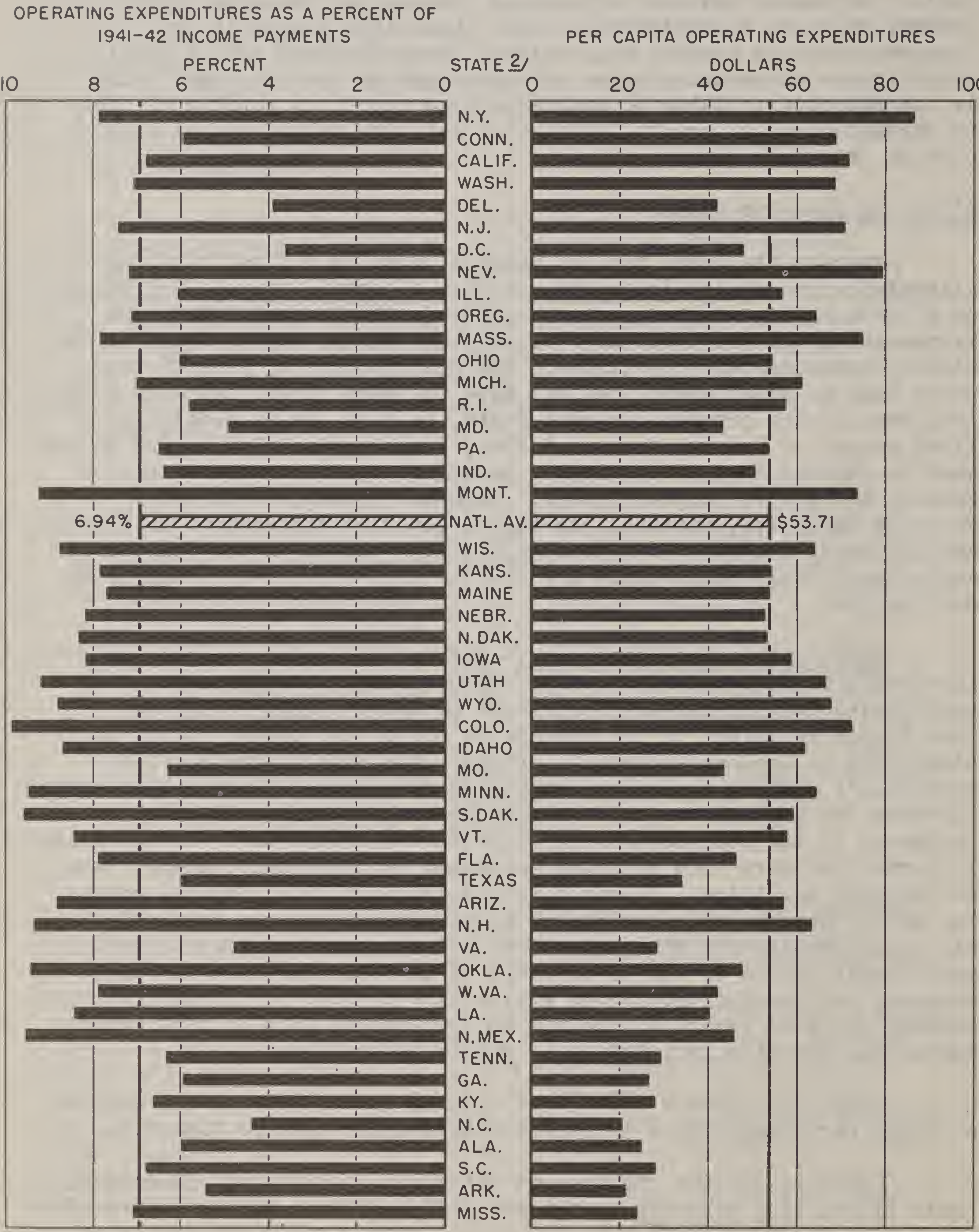
Public assistance financing.—Before the Social Security Act Amendments of 1946 went into effect on October 1, 1946, Federal aid paid toward monthly old-age assistance payments ranged from less than $6 per recipient on the average in one of the poorer States to almost $20 in another and wealthier one. The size of the average recipient's monthly assistance check and the Federal contribution toward it under the amendments varies almost as much by the accident of residence of the recipient as in accordance with his need for assistance. It varies far more than could be justified by differences among States in the cost of living. It was this maldistribution of Federal grants for public assistance among States as well as the desire to use Federal aid to compensate for the higher cost of living that helped to bring about modification of the 50-50 basis of distributing Federal funds. However, the amended provisions will expire on June 30, 1950, and Federal aid will revert to the old 50-50 basis on July 1, 1950, unless additional amending legislation is passed before then.

Under the present fractional reimbursement, Federal aid will be a larger percentage share in States with smaller average payments.

However, neither the present fractional nor the old 50-percent basis of matching directly recognizes differences in the abilities of the

CHART 4.

STATE AND LOCAL GOVERNMENT OPERATING EXPENDITURES AS A PERCENT OF INCOME PAYMENTS, AND AMOUNTS PER CAPITA, BY STATE [1]



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[1] DERIVED FROM 1942 CENSUS OF GOVERNMENTS DATA, AND FROM INCOME PAYMENTS DATA IN THE SURVEY OF CURRENT BUSINESS, AUGUST 1944, P. 14.

[2] STATES RANKED BY 1943-45 PER CAPITA INCOME.

several States to finance public assistance, or differences in the needs of the several States growing out of the greater incidence of poverty in the low-income States. Within the limits stated, the fixed matching percentage does recognize differences in effort to the extent that State-local effort is matched at whatever level it is exerted. The present aid formula, by offering the same fractional support to all States, takes no direct or systematic account of differences in their ability.

Public assistance is but one of the public services for which State and local governments must tax the revenue bases available in the State. It is appropriate, therefore, to examine the over-all effort expended by all units of government in each State to determine whether or not the degree of effort made in each State for governmental services influences the public assistance programs.

The 1942 Census of Governments data on State and local operating expenditures are used here rather than tax collection data to measure effort, because the former represents the cost of operating governmental services during the year and because they are free from some erratic factors associated with any 1 year's tax collections, which are especially great during wartime. Use of tax collection data, however, would not materially change the results.

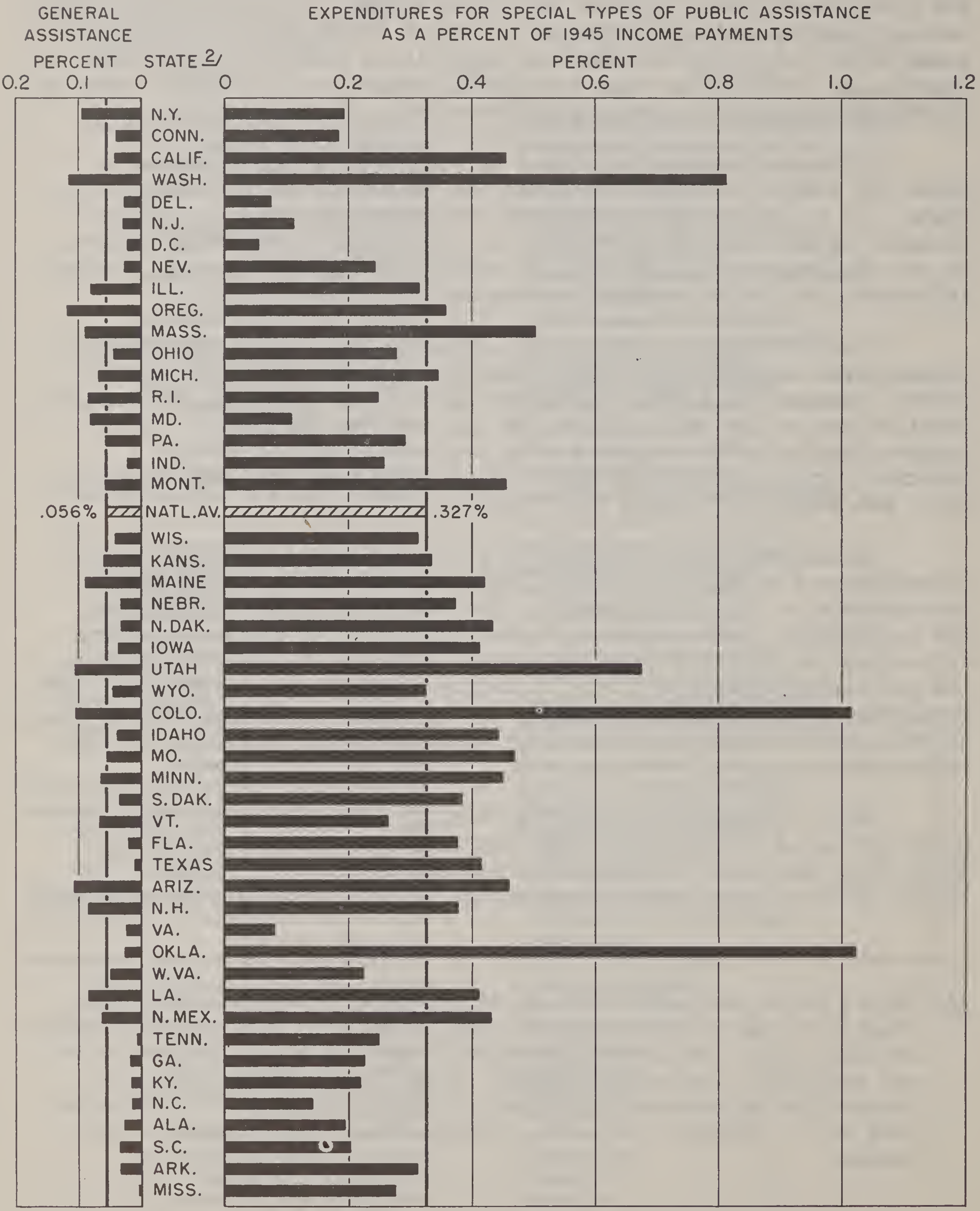
An analysis of differences in State and local operating expenditures for 1942 is shown in chart 4, with the States arrayed in accordance with per capita income. The left side of the chart shows the percentages these operating expenditures were of income payments, reflecting the relative degree of fiscal effort. The right side shows the per capita amounts of these operating expenditures. The results are revealing. Less than one-fourth of the upper-income States exerted effort appreciably above the national average, while two-thirds of the below-average-income States appreciably exceeded that average.

Chart 5 indicates a generally similar situation with respect to State and local effort exerted for the public assistance programs in 1945. Only one-third of the richer States, in contrast to almost two-thirds of the poorer, made above-average effort for public assistance.14/

14/ On the other hand, 10 of the 18 high-income States in contrast to only 10 of the 31 with below-average income made greater than average effort for general assistance (for which Federal grants are not available) indicating support for Mr. Key's thesis that the States with below-average income are nearer to the margin of income that can be diverted to public purposes than are the high-income States.

CHART 5.

STATE AND LOCAL EXPENDITURES IN 1945 FOR GENERAL ASSISTANCE AND FOR THE THREE SPECIAL TYPES OF PUBLIC ASSISTANCE, AS A PERCENT OF INCOME PAYMENTS, BY STATE 1/



1/ EXPENDITURES FROM STATE AND LOCAL SOURCES, EXCLUDING FEDERAL AID, AS REPORTED BY THE BUREAU OF PUBLIC ASSISTANCE, SOCIAL SECURITY BOARD, FOR 1945; 1945 INCOME PAYMENTS FROM THE SURVEY OF CURRENT BUSINESS, [AUGUST 1946, P. 16

2/ STATES RANKED BY 1943-45 PER CAPITA INCOME.

While State and local tax effort, whether for all operating expenditures or for public assistance, does not show a close State-by-State correlation with State per capita income, there is a clear tendency for the poorer States to make greater, rather than less, effort. Even if all States were to make the same effort, however, the results would still show wide variations in per capita amounts. For example, chart 4 shows that 1942 operating expenditures in the State of Washington represented 7.06 percent of the State's total income, or $68.55 per capita of its population, while Mississippi made slightly greater effort, spending 7.09 percent of its income payments though this amounted to only $23.84 per capita. It is true, as the charts disclose, that a few States, both rich and poor, have made an effort appreciably below the average. On the whole, however, the poorer States are making substantial effort, so that basic persistent differences among States in the amount of Federal grants received cannot be explained by differences in effort.

The variation in per capita Federal aid for public assistance is a reflection of differences in ability and effort among States. The attached scatter diagram (chart 6) shows that for States below and up to the national average in income, per capita Federal aid is largely a function of per capita income. A correlation between these series for 19 of the 21 States with per capita incomes below $1,000 15/ yields a value for r equal to +.88. For 26 of the 28 States with per capita income exceeding $1,000, this linear relationship changes and r equals -.505.16/ As is discussed below, the latter group of States has found a smaller number to be in need, and is able to meet this smaller extent of need more adequately with less effort because of greater fiscal ability. As a result, the slope of the line reverses (though the line does not fit nearly so well).16/

The average payments to recipients under the federally aided assistance programs show clearly the influence of the foregoing factors. Variation in these payments is a reflection of differences in fiscal ability and effort, and of the extent of need or "incidence of poverty." The right side of chart 7 shows the average monthly payments for old-age assistance in each State for June 1945. An inspection discloses that the payments tend to correlate directly, though imperfectly, with the per capita income array on the left side. As discussed above, the

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15/ Federal grants are for the calendar year 1945. For opposite reasons, data for Oklahoma and Virginia bear little relationship to others in this group, and hence are excluded from this calculation. The linear relationship for these 19 States is: y equals -3.15 plus .0074x. The standard error of estimate of this line is .532.

16/ Data for Oklahoma and Washington State are so divergent from the group that they are excluded from this calculation. For these 26 States, y equals 8.15 minus .0042x. The standard error of this line is 1.1.

CHART 6.

PER CAPITA FEDERAL GRANTS FOR PUBLIC ASSISTANCE IN RELATION TO PER CAPITA INCOME

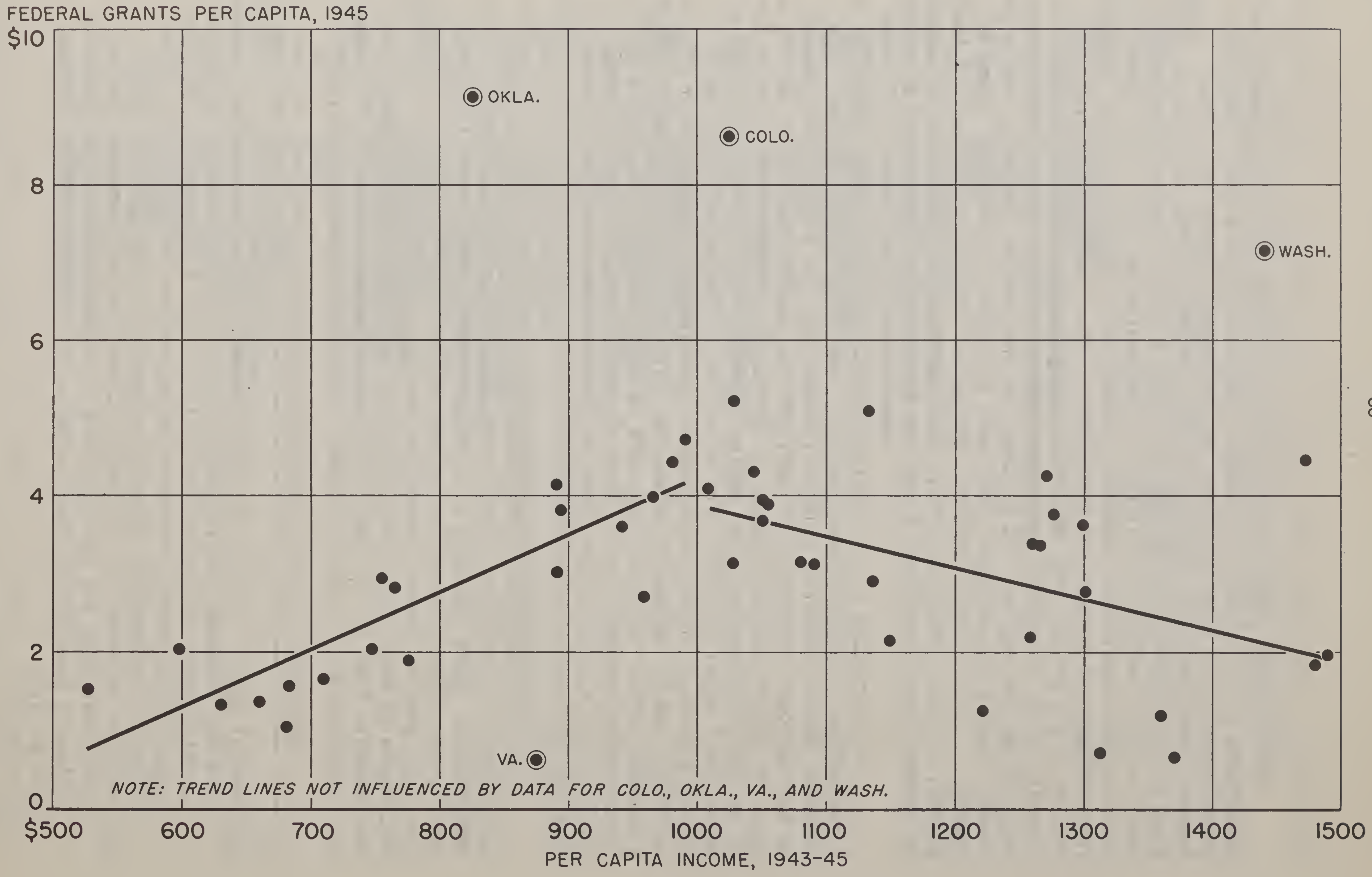
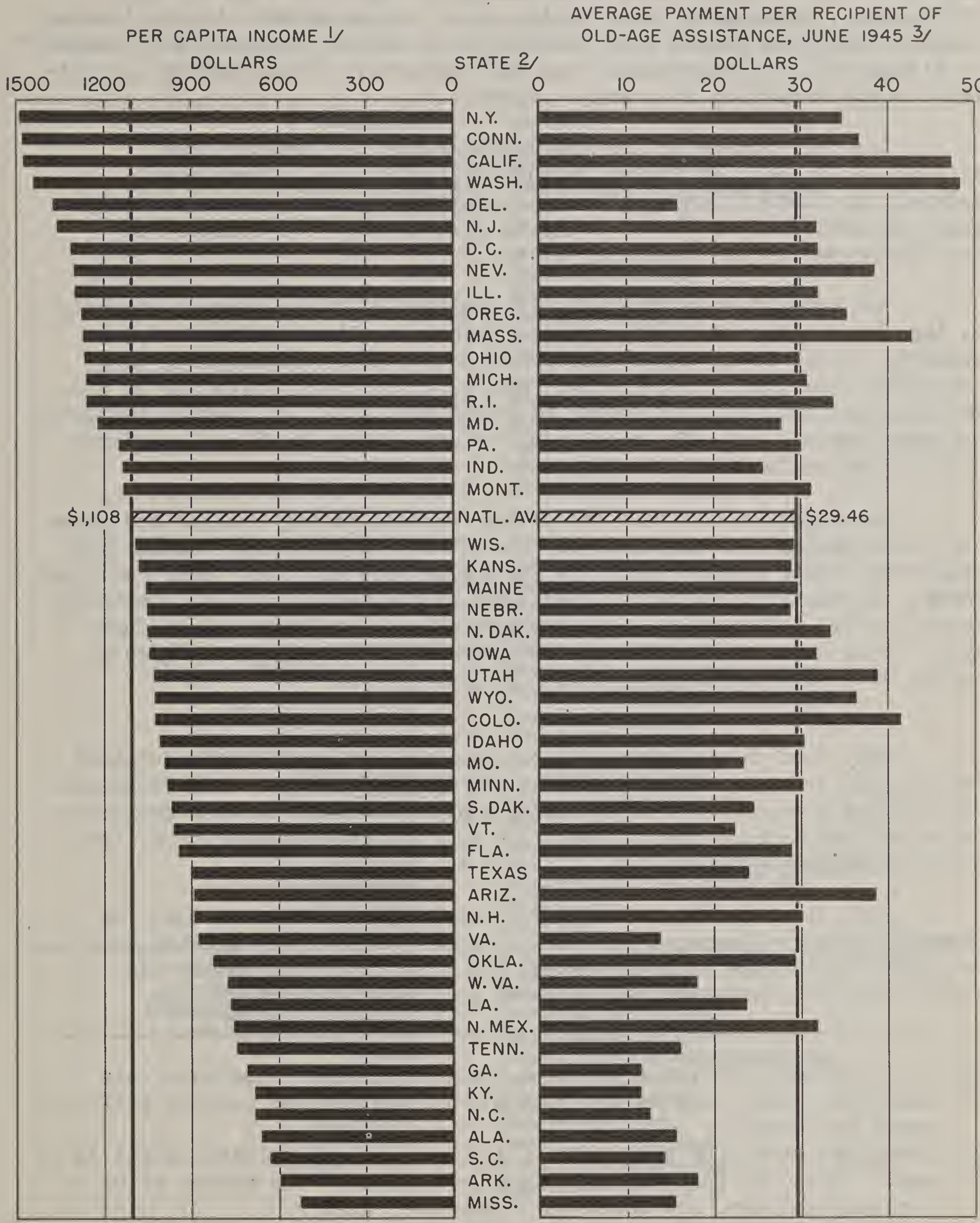


CHART 7.

PER CAPITA INCOME AND AVERAGE MONTHLY PAYMENT PER RECIPIENT OF OLD-AGE ASSISTANCE BY STATE



1/ AVERAGE 1943-45 PER CAPITA INCOMES FROM SURVEY OF CURRENT BUSINESS, AUGUST 1946, P. 16.

2/ STATES RANKED BY 1943-45 PER CAPITA INCOME.

3/ FROM SOCIAL SECURITY BULLETIN, AUGUST 1946, P. 38.

effort made does vary to some extent among States, especially among the high-income States, and this variability accounts for some of the differences, especially among States close to one another in the income array. Among the States with below-average income, however, differences in fiscal ability are probably the most important single factor accounting for the variation in average payments.

The differences in average payments are far greater than differences in cost of living in the various States. Given equal Federal and State sharing of public assistance costs, it is unlikely that the lower-income States would be able to meet the standard of assistance met by the wealthier States.

The other factor that affects the size of these average payments is the extent of need in the various States, or the incidence of poverty. There is no way to determine on a uniform basis, from the statistics now available, how many needy persons each State should aid in each category.17/ The number of recipients does, of course, indicate how many persons actually receive assistance under the State standards and within the funds at its disposal.

One might expect that the poorer States, having smaller resources and consequently low standards of "need," or "requirement," would find relatively fewer persons eligible for assistance and that their recipient rates, accordingly, would be lower than in the richer States. Recipient rates for aid to dependent children and old-age assistance (for June 1945) show, however, that the poorer States have a relatively greater number of needy persons 18/ to whom they pay assistance (chart 8).

Only 5 of the 18 richer States had old-age assistance recipient rates above average, while only 9 of the 31 poorer States had recipient rates below average. A similar situation is shown by old-age recipient rates in June 1946, a year later. For aid to dependent children, the differences are less striking.

Thus, past experience with recipient loads indicates that the poorer States are hampered not only by having relatively smaller resources to finance their programs, but also by having to provide assistance for a heavier load of needy persons. Federal aid for

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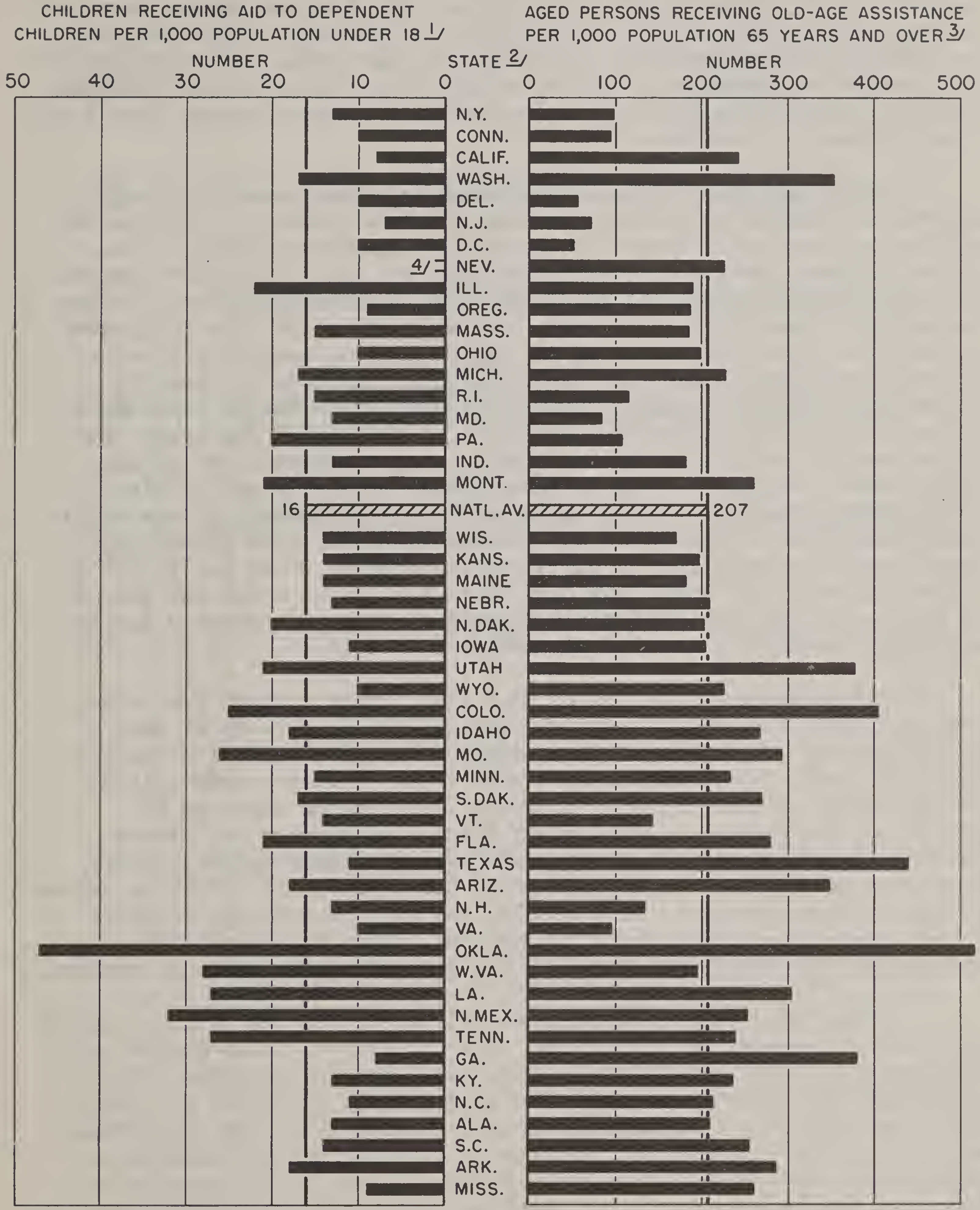
17/ If there were precise figures on income by small class-intervals among the lowest-income group, State by State, more precise estimates would be possible.

18/ Recipient rates for aid to the blind are not sufficiently exact to be used. The case load is small, and estimates of the number of blind persons, by State, are based on inadequate data.

CHART 8.

RECIPIENT RATES FOR AID TO DEPENDENT CHILDREN AND OLD-AGE ASSISTANCE BY STATE, JUNE 1945



1/ FROM SOCIAL SECURITY BULLETIN, AUGUST 1945, PP. 38-39.

2/ STATES RANKED BY 1943-45 PER CAPITA INCOME.

3/ FROM SOCIAL SECURITY BULLETIN, SEPTEMBER 1945, P. 19.

4/ PROGRAM ADMINISTERED WITHOUT FEDERAL AID.

public assistance, as it was distributed before the 1946 amendments, did nothing to compensate for this double handicap. It is difficult to isolate for a certainty what direct effect the 1946 amendments have had on recipient rates apart from the effects of economic conditions, as the number of recipients has been climbing each month. Average payments have tended to increase by smaller amounts than the additional Federal aid would, theoretically, have made possible, perhaps because case loads have increased at the same time.

These interrelationships[19/] can perhaps be best seen if a single program is studied in relation to each of these factors. In table 12, which considers each factor for the old-age assistance program, the facts for each State are shown separately, but for comparative purposes the subtotals are shown for the three major income-groupings of States. Taking one income group at a time, the table shows that the 18 upper-income States had 55 percent of the population but only 47 percent of the aged recipients, and that their recipient rates were generally below the national average. The residents of these States received 65 percent of the income payments to individuals in 1945, but spent only 58 percent of the total State and local money disbursed for old-age assistance. Because several of these States were able and willing to make payments in excess of the amounts for which Federal aid was available, they drew 55 percent of the Federal aid. In terms of effort, their average expenditure on old-age assistance of $2.25 per $1,000 of income payments was lower than that of either of the other two groups of States, yet in June 1945 all but three of these States were making average payments in excess of the national average.

The middle-income group of 13 States (which, except for Maine, are West North Central and Mountain States) had 14 percent of the population and 20 percent of the old-age recipients. Notwithstanding high recipient rates and the fact that their residents drew only 13 percent of the income payments in 1945, these States expended 20 percent of the State and local money devoted to old-age assistance and drew 21 percent of the Federal old-age assistance grants. Every State but the richest one in this group had expenditure effort in excess of the national average. As a result, the average payments in these States tended to cluster about the national average; the weighted average for the group for June 1945 was just above the national average.

Among the 18 low-income States, 31 percent of the Nation's people drew only 22 percent of the income. All but four of these States had above-average recipient rates; in all, they care for 33 percent of all aged recipients of assistance. As a group, their effort is a little more than equal to the national average, so that they spent 22 percent of the State and local money paid out in 1945 for old-age assistance. It will be noted that many of these States did not spend appreciably more than the amounts for which there is Federal matching; consequently, the dollar amount of Federal aid they received (24 percent of the total) was within one-third of 1 percent of the State and local dollar

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[19/] For simplicity sake, this analysis is confined to the 50-50 matching formula.

Table 12.—Effort expended in financing old-age assistance and burden required to raise State average monthly payments to $35

State	1943-45 average per capita income	Population, July 1, 1945 (excluding military forces overseas)	Number of recipients of OAA, June 1945 1/	Recipient rates, June 1945 2/	Income payments, 1945 (millions)	State-local expenditures for OAA, 1945 2/ (thousands)	Federal aid for OAA, 1945 2/ (thousands)	State-local effort for OAA, 1945 per $1,000 of income payments	Average OAA payment, June 1945 1/	Percentage increase in effort to raise average payments to $35	Total effort required to raise average payments to $35, per $1.000 of income payments
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
49 States	$1.108	131,975,774	2.035,683	207	$152,704	$382,564	$342,163	$2.51	$29.46	4/ 35.3	4/ $2.85
High-income group	---	72,297,299	951,482	3/ 163	99,277	223,812	187,924	2.25	35.87	4/ 13.1	4/ 1.84
Percent of total	---	55	47	---	65	58	55	---	---	---	---
New York	1,489	12,584,913	103,550	98	20,308	24,317	20,161	1.20	34.79	.6	1.21
Connecticut	1,480	1,786,300	13,878	94	2,608	3,343	2,842	1.28	36.73	---	---
California	1,473	8,822,688	157,876	243	13,124	52,898	36,867	4,03	47.32	---	---
Washington	1,441	2,088,574	60,861	354	2,971	20,750	14,061	6.98	48.29	---	---
Delaware	1,371	286,832	1,297	57	398	125	125	.31	15.84	121.0	.69
New Jersey	1,360	4.200,941	23,576	71	5,655	4,589	4,233	.81	31.74	10.3	.89
District of Columbia	1,313	938,458	2,434	51	1,617	512	468	.32	31.89	9.8	.35
Nevada	1,302	159,804	1,919	226	196	442	442	2.26	38.42	---	---
Illinois	1,299	7.721,099	121,529	190	10,589	23,892	23,016	2.26	31.93	9.6	2.48
Oregon	1,276	1,206,322	20,040	187	1,549	4.533	4,212	2.93	35.37	---	---
Massachusetts	1,271	4.183,179	74.561	185	5,592	22,440	16,129	4.01	42.76	---	---
Ohio	1,266	6,873,448	118,242	199	8,925	21,079	21,068	2.36	29.85	17.3	2.77
Michigan	1,260	5,471,774	84,357	228	6,672	15,776	15,684	2.36	30.65	14.2	2.70
Rhode Island	1,258	758,222	7,214	116	948	1,574	1,377	1.66	33.67	4.0	1.73
Maryland	1,222	2,125,419	11,556	84	2,467	1,930	1.930	.78	27.77	26.0	.98
Pennsylvania	1,149	9.193,957	82,675	108	11,134	15.123	14.839	1.36	30.00	16.7	1.59
Indiana	1,136	3.437,745	55,184	181	3.985	8,485	8,466	2.13	25.61	36.7	2.91
Montana	1,133	457,624	10,733	262	539	2,004	2,004	3.72	31.10	12.5	4.19
Middle-income group	---	18,551,434	404,245	3/ 250	20,406	74,827	70,548	3.67	29.68	4/ 25.4	4/ 4.10
Percent of total	---	14	20	---	13	20	21	---	---	---	---
Wisconsin	1,091	2,952.205	44,923	171	3,451	7,890	7,889	2.29	29.14	20.1	2.75
Kansas	1,080	1,740,379	28,087	198	1,938	5,127	4,739	2.65	28.82	21.4	3.22
Maine	1,055	785,913	14,894	182	830	2,617	2,617	3.15	29.59	18.3	3.73
Nebraska	1,051	1,198,492	24,108	210	1,347	4,215	4,215	3.13	28.74	21.8	3.51
North Dakota	1,051	520,935	8,722	203	588	1,883	1.595	3.20	33.32	5.0	3.36
Iowa	1,044	2,259,526	49,277	205	2.516	9,583	8,987	3.51	31.72	10.3	4,20
Utah	1,028	616,989	12,871	379	641	3,092	2,804	4.82	38.73	---	---
Wyoming	1,027	246.766	3,359	227	274	743	687	2.71	36.30	---	---
Colorado	1,025	1,120.595	40,448	405	1,238	11,218	8,864	9.06	41.35	---	---
Idaho	1,008	500,109	9,638	268	512	1,831	1,752	3.58	30.22	15.8	4.15
Missouri	991	3.556.693	100,406	293	3,806	14,553	14,553	3.82	23.36	49.8	5.72
Minnesota	981	2,497,485	54,820	233	2,666	10,161	9,932	3.81	30.12	16.2	4.43
South Dakota	966	555,347	12,692	270	599	1,914	1,914	3.20	24.53	42.7	4.57
Low-income group	---	41,127,041	679,956	3/ 266	33.021	83.925	83,691	2.54	20.36	4/ 74.0	4/ 4.38
Percent of total	---	31	33	---	22	22	24	---	---	---	---
Vermont	958	310,352	5,158	143	320	699	699	2.18	22.30	57.0	3.42
Florida	942	2,385,917	40,815	280	2,387	7,112	7,112	2.98	28.88	21.2	3.61
Texas	894	6,786,740	169,812	440	6,263	23,943	23.943	3.82	23.90	46.4	5.59
Arizona	891	630.298	9,431	349	581	2,195	2,189	3.78	38.55	---	---
New Hampshire	891	452,174	6,545	134	446	1,168	1,165	2.62	30.03	16.6	3.05
Virginia	875	3.079,706	15,037	97	2,597	1,266	1,266	.49	13.70	155.5	1,25
Oklahoma	826	2,034,460	78,275	517	1,820	15,116	15.116	8.31	29.27	19.6	9.94
West Virginia	776	1,724,677	18,543	196	1,457	1,876	1,876	1.29	17.98	94.7	2.51
Louisiana	765	2.456,057	36.445	303	1,931	5.083	4,994	2.63	23.65	48.0	3.89
New Mexico	755	535.220	5,843	253	431	1,166	1,044	2.71	31.81	10.0	2.98
Tennessee	747	2,878,777	37,917	239	2.353	3.685	3.685	1.57	16.08	117.7	3.42
Georgia	710	3,191.766	66,418	380	2,369	4.581	4.581	1.93	11.42	206.5	5.92
Kentucky	683	2,578,179	48,190	237	1,916	3,295	3,295	1.72	11.46	205.4	5.25
North Carolina	681	3.504.626	32,743	212	2,575	2,482	2,481	.96	12.50	180.0	2.69
Alabama	660	2,812,301	31,948	209	1,980	3,008	3,002	1.52	15.51	125.7	3.43
South Carolina	630	1,905.597	21,393	256	1,265	1,904	1,904	1.51	14.14	147.5	3.74
Arkansas	597	1,779,817	27,906	287	1,171	2,798	2,792	2.39	17.99	94.6	4.65
Mississippi	527	2.080,377	27,537	260	1,159	2,548	2,547	2.20	15.42	127.0	4.99

1/ Social Security Bulletin, August 1945, p. 38.
2/ Data from Bureau of Public Assistance releases.
3/ Unweighted average.
4/ Group totals and total for all States are for States having an average payment in June 1945 of less than $35.

amount of expenditures. As a result only 3 of these States in June 1945 made average payments in excess of the national average; in 10 the average payments were less than $18; and in 2 States, Georgia and Kentucky, the averages were just under $11.50. Thus in the extreme cases, the average payments were less than 40 percent of the national average, or less than 25 percent of the average payments in the States of California and Washington.

In June 1945, 10 States made payments averaging in excess of $35.[20/] Assuming that the remaining 39 States wished to raise their average payments to $35, the amount of additional State-local financial effort needed would be largely an inverse function of per capita income. Among the upper-income States, six already exceeded $35, and no extra effort would have been required; in nine others, increases up to 17.3 percent would have been necessary; and the other three would have had to increase their effort by 26, 37, and 121 percent, respectively. Among the middle-income group, only 3 exceeded $35; the other 10 States would have had to put forth, on the average, 25.4 percent more effort, and of these the greatest increase, 49.8 percent, would have been needed in Missouri. Only one of the low-income group of States was paying an average in excess of $35. Seven of the others could have paid an average of $35 by increasing effort from 10 to 57 percent; the remaining 10 States would have had to expend from 94 to 207 percent more effort; and the group as a whole would have required an average increase of 74 percent.

Column 12 of table 12 provides an expression of the same thing in terms of tax effort required to raise payments to an average of $35 in each State. For the Nation as a whole, if State-local annual tax effort for old-age assistance averaged $2.85 per $1,000 of income payments, it would have been possible to make average monthly payments equal $35 per recipient. For the 12 upper-income States now paying less than this, an annual expenditure of $1.84 per $1,000 would have been sufficient; the 10 middle-income States would have had to spend $4.10 per $1,000, and the 17 low-income States would have required an average effort of $4.38 per $1,000 of income payments. With its June 1945 case load, Oklahoma would have had to spend $9.94 per $1,000 to make monthly payments to old-age assistance recipients average $35.

The foregoing analysis is predicated on the assumption of 50-50 matching of State and Federal funds, as prevailed in June 1945. Because the 1946 amendments provide that the Federal Government will reimburse a State for $10 of the first $15 of the average payment, the conclusions would be practically the same, with respect to the situation in 1947, if $40 were substituted for $35 wherever it appears above.

[20/] $35 approximates the average monthly payment at the time the revised formula went into effect.

As previously indicated, equalization has two facets: equal program levels for equal State-local financial effort. This analysis indicates that equal financial effort on the part of different States does not now result in equal program levels. Indeed, as table 13 illustrates, over the past 11 fiscal years of Federal aid for public assistance programs, cumulative grants have been higher per capita among the upper-income and middle-income States than among the lower-income States.

Table 13.—Total Federal grants for public assistance per capita fiscal years 1936-46 inclusive

National total per capita	$24.45
High-income States	26.44
Middle-income States	1/ 33.64
Low-income States	16.64

1/ That per capita grants among these States are higher than in the high-income States is largely due to the lower level of recipient rates and of effort in many of the high-income States, as illustrated by the data for 1945 in Table 12.

Conclusion

Close inspection of the operation of present Federal aids, especially those for public assistance, discloses that these grants are not conforming to the basic principle of direct relationship to need, State by State, and of inverse relationship to fiscal ability, State by State. Especially in open-end matching grant programs, where State ability to support the service seems to be the controlling factor, Federal aid seems to be offered on a basis quite the opposite of this principle.

If the twin goals of equal program levels for equal effort are to be realized, techniques for allocation and matching of Federal grants will need further analysis and revision to bring the results in line with the principles stated.

CHAPTER VI

A RESTATEMENT OF THE PROBLEM

Restatement of the Goals

Governments exist, among other reasons, to perform certain necessary services that cannot be performed adequately on a private basis. For reasons outlined above, the Federal Government offers grants-in-aid to States for certain major functions, including economic security, health, education, development and conservation of natural resources, and transportation. Modern government would act with respect to these services whether or not that action included the use of grants-in-aid.

In a democratic society, considerations of equity demand that governmental programs at each level treat all citizens in similar circumstances uniformly. When the central government uses grants-in-aid, it has the double responsibility of allocating those grants so as to make equitable treatment possible and to assure that the local administration of the program produces equity in actual operations. The first is largely a fiscal problem and is the one with which this study deals. The second is an administrative-relations problem and, except as the fiscal relations facilitate or impede its solution, is not discussed, here.

In allocating grants, the central government should take into account differences in the need for aid of its constituent units. Moreover, when these units are required--either explicitly by law or simply to maintain an adequate program--to contribute to the financing of the aided service, it may be stated as a reasonable premise that the central, grant-making government should vary its grants inversely with the ability of the local unit to support the service. This principle is vital with respect to the more expensive of the aided services.

In cooperatively financed programs, the grant-making agency has two basic reasons for allocating grants in inverse ratio to the fiscal ability of the receiving unit. The first is that only by so doing can it facilitate equity of treatment among recipients of government services in jurisdictions with widely divergent fiscal abilities to support the service. The second is that the central, grant-making unit should consider equity among taxpayers in different constituent units and should attempt to make the local tax burden for an aided service reasonably uniform among the constituent jurisdictions.

Subsidiary goals might include encouragement of well-rounded and well-balanced administration of governmental services at the local level. Budget-making is largely choosing and evaluating among competing demands on government. The existence of a grant-in-aid for a specific purpose can influence that choice, often at the expense of other services for which the need may be as great or greater. The purposes for which aid is given should be reexamined and redefined to encourage the best allocation of governmental resources at each level of government. At the same time, grants should respect the goal of preserving and fostering State-local initiative and control over the specific content of aided services, within the broad framework of national purposes to be served.

Problems Associated with Grant Allocation

A variety of questions requires answer in devising equitable financial provisions for grants-in-aid. Several of the most important ones are raised below, and some considerations affecting the answer are given.

Should the total amount of the grant be fixed?--The answer to this question depends on such factors as: (a) the likelihood of considerable variation from year to year in the need for the service, (b) the possibility of measuring that need in advance, (c) the possibility of waste resulting from failure to fix a limit, and (d) the extent of the grantor's interest in the function. Examples of alternative choices made in the past can be found in chapter IV.

Should the pattern of distribution be fixed or variable?--The decisions made in the past range from a flat amount for each State to an indeterminate amount depending on State expenditures, and to complete discretion for the administrator. The decision should rest on factors similar to those in the preceding paragraph, namely: (a) the likelihood of variation from unit to unit and from time to time in the need for the service, (b) the possibility of measuring that need and fixing its amount and its limits, (c) the danger of abuse if no limits are fixed, and (d) the differences in fiscal ability of the various constituent units to support the service, with or without aid.

Should the receiving units be REQUIRED to contribute?--Differing circumstances in the past have dictated differing answers. Factors influencing the decision include: (a) the relative interest in the function on the part of the granting and of the receiving unit, (b) the newness of the function and the related necessity to demonstrate its utility, (c) the probability of heavy expenditures for the function by the receiving unit whether or not aid is given and contributions required, and (d) the existence of special taxes earmarked for the function. If the grant program is to be a really cooperative venture among the different levels of government, and if the receiving units are to have much of a voice in the use of the money, it is reasonable that they should be required to share financially in the total amount to be spent. It is generally held that a requirement of financial participation by the recipient units ensures more careful and economical administration.

How should the contribution of the receiving unit be assessed?--Assuming that the receiving unit is to contribute financial support for the aided program, equity demands that this contribution be so determined that, in conjunction with the aid given, there will be reasonable uniformity of performance of the function among the different jurisdictions, and that the tax burden of this contribution will not be materially greater on some receiving units than on others.

In brief, the determination of an appropriate contribution by the recipient unit is intimately tied up with the method of allocation of aid by the central government. The amount of the contribution, basically, should bear a reasonable relationship to the fiscal ability of the unit. This principle is the logical corollary of the principle that aid should be given in direct proportion to need but in inverse proportion to the ability of the receiving unit to support the function.

By this criterion, the usual method of requiring straight matching of the amount of aid does not measure up--as the analysis in chapter V demonstrates. Similarly, an indefinite requirement of "some" financial participation by the receiving unit fails to measure up, for it contains no assurance that the tax burden assumed will be equitable, or that the resulting totals spent will yield reasonably uniform results.

The mathematics and method of assessing contributions can take a variety of forms. The receiving units, for example, can be required to contribute: (a) specific or minimum dollar amounts, however fixed, (b) specific or minimum proportions of the total to be spent, (c) not less than a specific proportion of the income payments to individuals in the State (or county), or (d) the equivalent of the yield of a uniform tax, whether on general property or some other tax base.

Summary

Many of the goals sought by central governments are best achieved through the use of grants-in-aid, although direct administration, shared taxes, and loans have a place in intergovernmental fiscal relations. In the United States, these grants will probably continue to be conditional--conditioned on their use for specified purposes and often on some financial participation by the receiving unit.

Grants for major functions which support general and expensive services like public assistance, education, and public health, should take into account the differences in need for these services among States and in different years. Because these services involve substantial State and local financial support, the Federal aid should also take into account the differences in the ability of the States to support these services. Specific details for implementing and applying this principle of interstate equalization in the distribution of Federal aid and in the assessment of State-local contributions will be discussed in part 3. Additional problems and proposals for applying these techniques to intrastate equalization through State grants given local units are discussed in appendix A.

PART 3 - FINDINGS

CHAPTER VII

THE BASIC EQUALIZATION FORMULA

Given indexes measuring State differences in both need and fiscal ability and acceptance of the principles developed in the preceding chapters, the allocation or matching procedures for equalization grants may be expressed in a basic mathematical formula.

Different degrees of equalization can be achieved through simple modifications of the basic formula. In this study the emphasis is on "full" equalization, or on the maximum amount of equalization possible with present measures of need and ability. Before taking up those measures in detail, it may be advisable to examine the outlines of a basic equalization formula and note briefly its salient points, including its elements of flexibility.

A simple definition of equalization has already been given. By definition, "full" equalization exists if Federal aid plus the amount each State could raise through expending a uniform percentage of its total fiscal ability (uniform effort) would together permit each State to spend a total amount that would provide a program equal to that in every other State, or, ignoring minor cost-of-living differences for simplicity's sake, a uniform amount per "program unit"--that is, per person served.

Mathematical Expression of the Basic Formula [1]

The basic formula can be derived most simply as a matching ratio.[2]

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[1] In this analysis, the author is indebted to Erick L. Lindman who has demonstrated this type of formula in an article, "Federal Aid for Education on an Equalized Matching Basis," published in the College of Education Record, Vol. X, No. 1, November 1943, and in several unpublished memoranda which were also made available, by courtesy of the State of Washington Office of Public Instruction.

[2] To derive the basic formula in mathematical terms:

Let Ab = total fiscal ability of all States, and
let P_{ab} = the fiscal ability of a single State, expressed as a percentage of the total for all States.
Similarly, let N = total need for a given service in all States, expressed as "program units," and
let P_n = need in a single State, expressed as a percentage of the total for all States.
Then P_nN = number of program units in a given State.
Let X = total State, or non-Federal, expenditures for the service. (Continued)

The ratio of Federal matching 3/ funds to non-Federal expenditures in a given State is equal to the support level (e.g.: 2) times the ratio of the State's relative need to its relative ability, minus 1. (Measures of need and ability are discussed in succeeding chapters.) The support level is the expected ratio of total Federal and non-Federal expenditures to total non-Federal expenditures alone.

Given these measures, such matching ratio could be used to make equalization grants. If the support level equals two (2), total Federal aid would tend to equal the total amount raised by the States from non-Federal sources and, if each State made uniform effort, the States could support a reasonably uniform program or each State could meet an equal percentage of its total need.

(Continued from page 92)

2/ Then $\frac{X}{N}$ = national average non-Federal expenditure per program unit.

Let K = "normal" non-Federal expenditure, or the expenditure in a given State, assuming it spent a percentage of its ability equal to the national average percentage.

Then K = the percent of ability in the State (P_{ab}) multiplied by the total non-Federal expenditures for the service, or

$K = P_{ab}X$, and, of course, $\sum(K) = X$

Assuming that the Federal Government wishes to equalize the total Federal and State expenditures at a support level (R) equal to twice the national average non-Federal expenditure, then:

If F = Federal aid to one State, and

if, for that individual State, $R = 2$

$F + K = 2\frac{X}{N} \cdot P_n N = 2X P_n$

or $F = 2X P_n - K$

To express the Federal aid as a matching ratio (M), or the ratio of F to K,

Let $M = \frac{F}{K}$, and divide each term in the preceding equation by K:

Then:

$$M = \frac{F}{K} = \frac{2XP_n}{K} - \frac{K}{K}$$

But $K = P_{ab}X$, and substituting above:

$$M = \frac{2XP_n}{P_{ab}X} - 1 = 2\frac{P_n}{P_{ab}} - 1$$

3/ "Matching," throughout this study, is assumed to mean not only the usual "50-50," or equal, matching, but any arrangement in which the recipient unit must contribute its own funds in some ratio to the aid, or the aid is contingent upon the recipient's contribution; hence, the "matching ratio" can be "variable" as well as "equal."

Modification of the Basic Formula

Two types of modification of this equation are readily feasible. In place of offering support equal to the non-Federal support but still keeping the objective of full equalization, the Federal Government could choose to contribute enough to triple the national average non-Federal expenditure, in which case R, the support level, would be changed from 2 to 3; or, if it wished to contribute only one-half the amount that non-Federal sources were contributing, the support level would change from 2 to 1 1/2. In an extreme case, if the Federal Government wished to aid only those States which could not, through uniform effort, maintain the national average non-Federal expenditure per program unit, R would become 1.

The other basic modification of this formula deals with the degree of equalization sought. The analysis given above assumes that the Federal Government seeks to equalize to the full extent possible within the limits of the formula, and thus the final term in the formula has the value of 1. It is possible, however, that the Federal Government would only wish to compensate the States, through the grant-in-aid formula, for some fractional part of the differences in fiscal ability to support a service. In this case, an "equalization fraction" (E) must be introduced into the formula 4/ or that is, the value of the final term must be reduced below 1. If the formula is used for full equalization, the value of E is 1. Values of E greater than 1 are "over-equalization.". Partial equalization might be defined as any positive value of E less than 1. Zero value would represent no equalization at all; grants that simply represent a uniform proportion of need in every State are in this category. In mathematical terms,

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4/ In the derivation above, E would modify the "normal" non-Federal expenditure, or K. Furthermore, R, the support level, then becomes a "minimum level"; the actual total in each State is greater by an amount equal to the difference between K and EK, or (1-E) K.

Thus: $F + E\,K = R\,\frac{X}{N} \cdot P_n N$, and

$$F = R\,X\,P_n - E\,K, \text{ and}$$

$$M = \frac{F}{K} = \frac{R\,X\,P_n}{K} - \frac{E\,K}{K} = \frac{R\,X\,P_n}{P_{ab}\,X} - E = R\,\frac{P_n}{P_{ab}} - E$$

Certain generalizations can be made from this formula by taking an average State, where the percent of total United States need equals the percent of total ability: then M, for an average State, equals R - E, which is the matching ratio between Federal and State funds for the average State. If aid goes to every State, and effort is reasonably equal among States, the total amount of Federal aid needed will be R minus E multiplied by the amount of non-Federal expenditures.

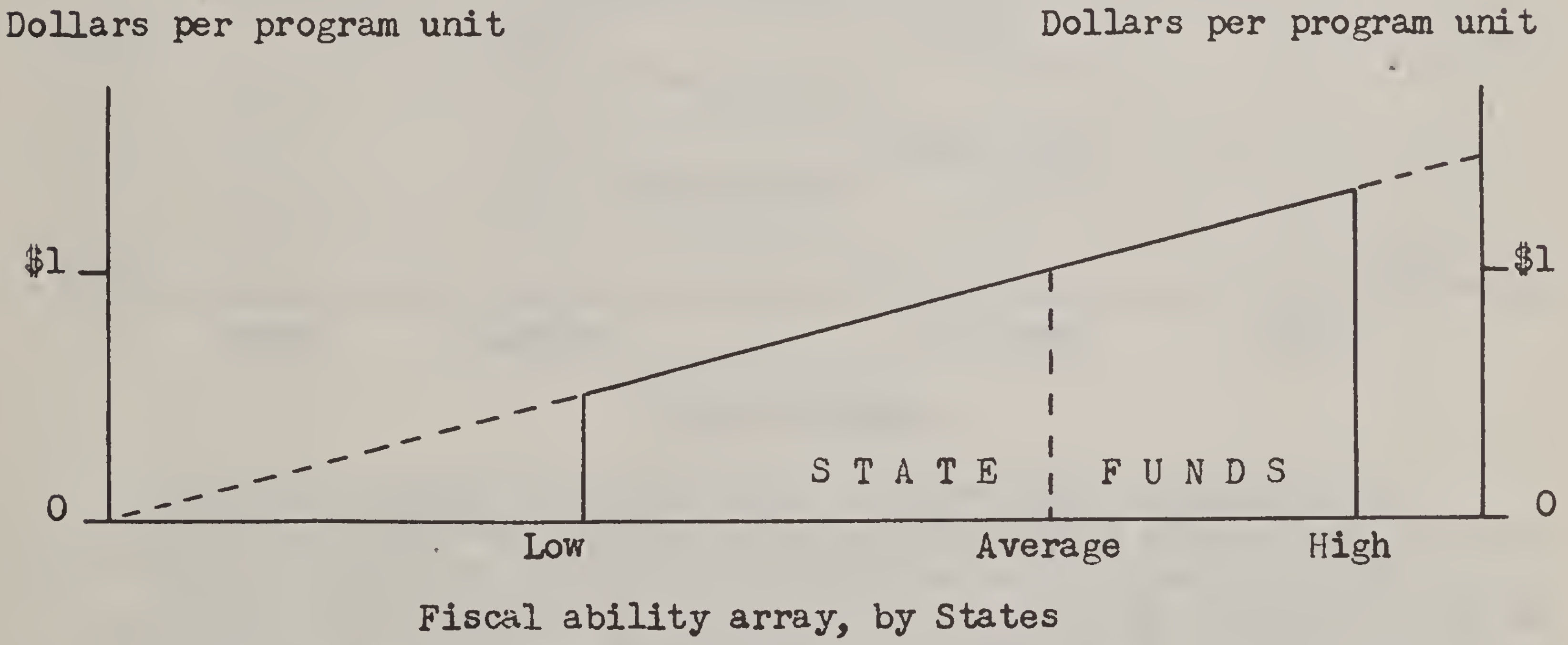
negative equalization exists if there are negative values to E. Several existing Federal grants that merely match State funds uniformly (M = 1) are represented by this formula when R equals zero, and E equals -1. Such grants not only fail to equalize for differences in fiscal ability but they also accentuate such differences.

Graphic Demonstration of the Formula

The charts below indicate the meaning of these differences in terms of Federal and non-Federal (or State [5])amounts per program unit among States with different fiscal abilities, assuming uniform effort on the part of the States.

Assuming uniform effort on the part of all States, and assuming that program units are reasonably distributed among States, it is possible to demonstrate in chart form that the amount of State funds per program unit, when no aid is given, is a direct function of the fiscal ability of the States. Chart 9 shows that the wealthier the State, the greater is the amount of State funds per program unit:

Chart 9.—State funds per program unit, with uniform effort



Adding the Federal aid that flows to a State when it is matching State funds dollar-for-dollar, the chart appears as follows (chart 10):

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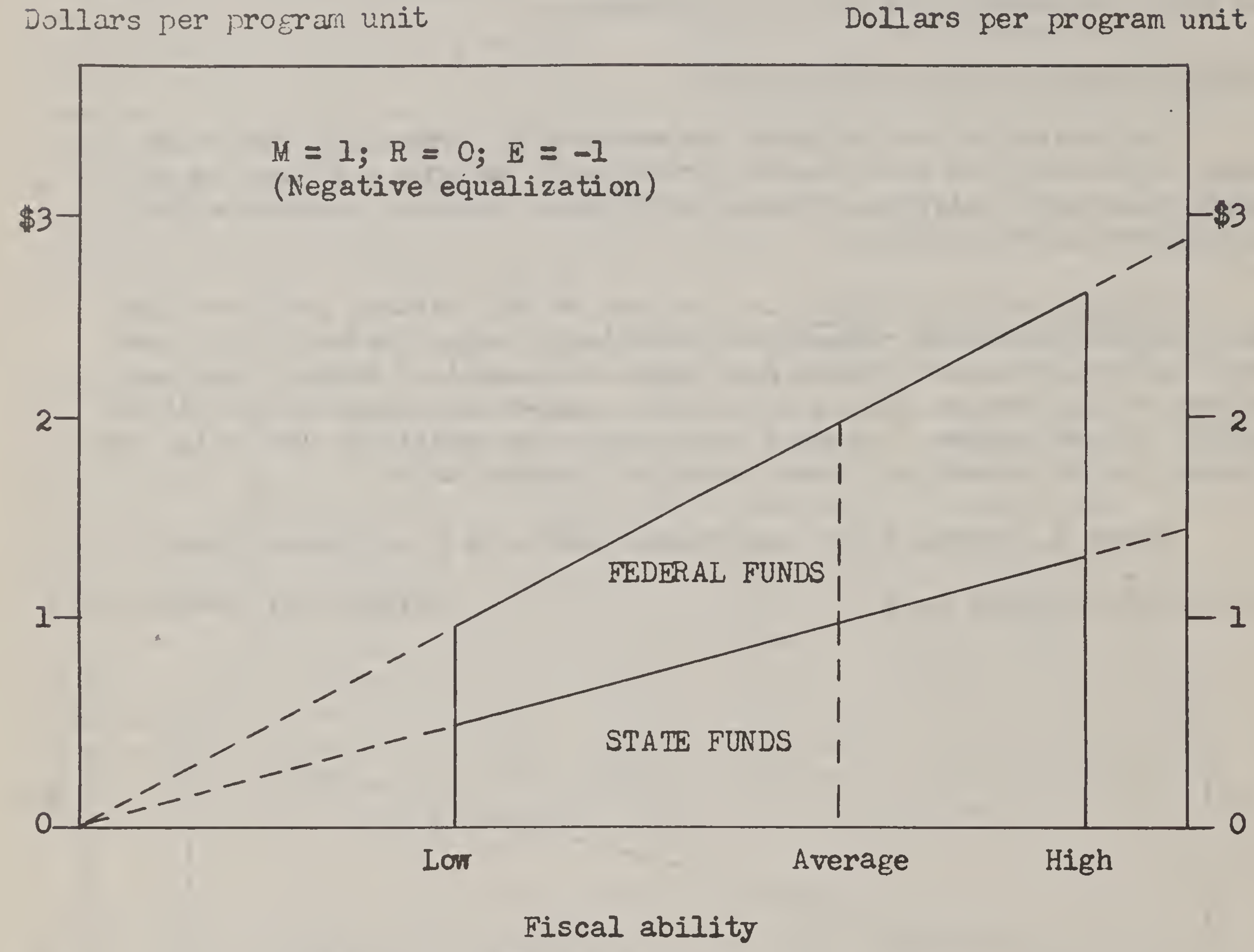
[5] "State" funds, as used in the remainder of this chapter, include local funds, or equal "non-Federal" funds for grant-in-aid purposes.

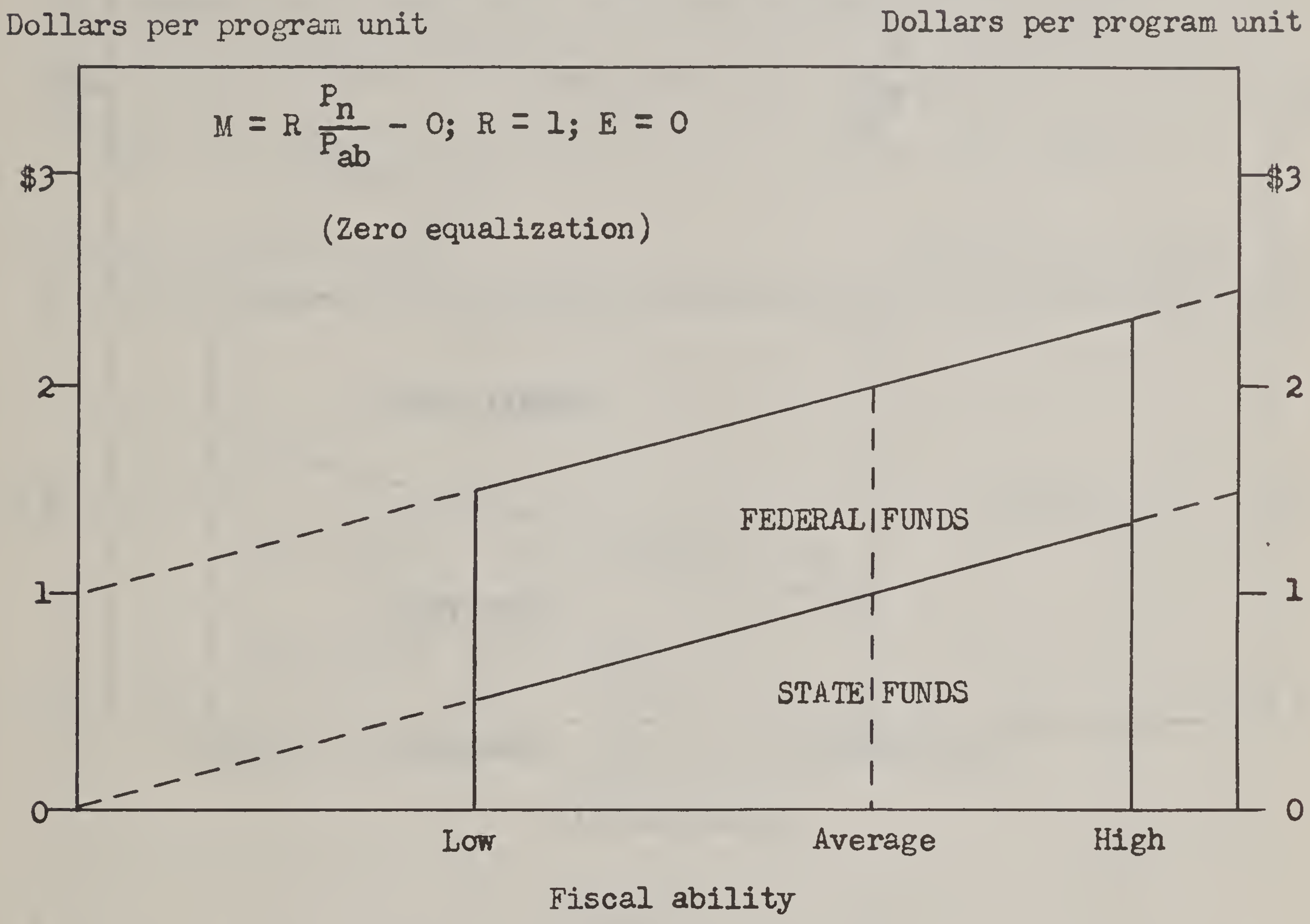
Chart 10.--Federal and State funds per program unit, uniform effort and equal matching



It is apparent that when the State with low ability can raise 50 cents per program unit, it will get 50 cents. If the average State, with the same effort, can raise $1 per program unit, it will receive Federal aid of $1; similarly a State with high ability will double its own funds, though these may already be greater than the sum of Federal and State funds in a low-ability State.

A uniform amount of Federal aid per program unit to each State is, as noted above, the quivalent of "zero equalization," but by contrast with the foregoing situation it appears to be an improvement. It can be represented as follows (Chart 11):

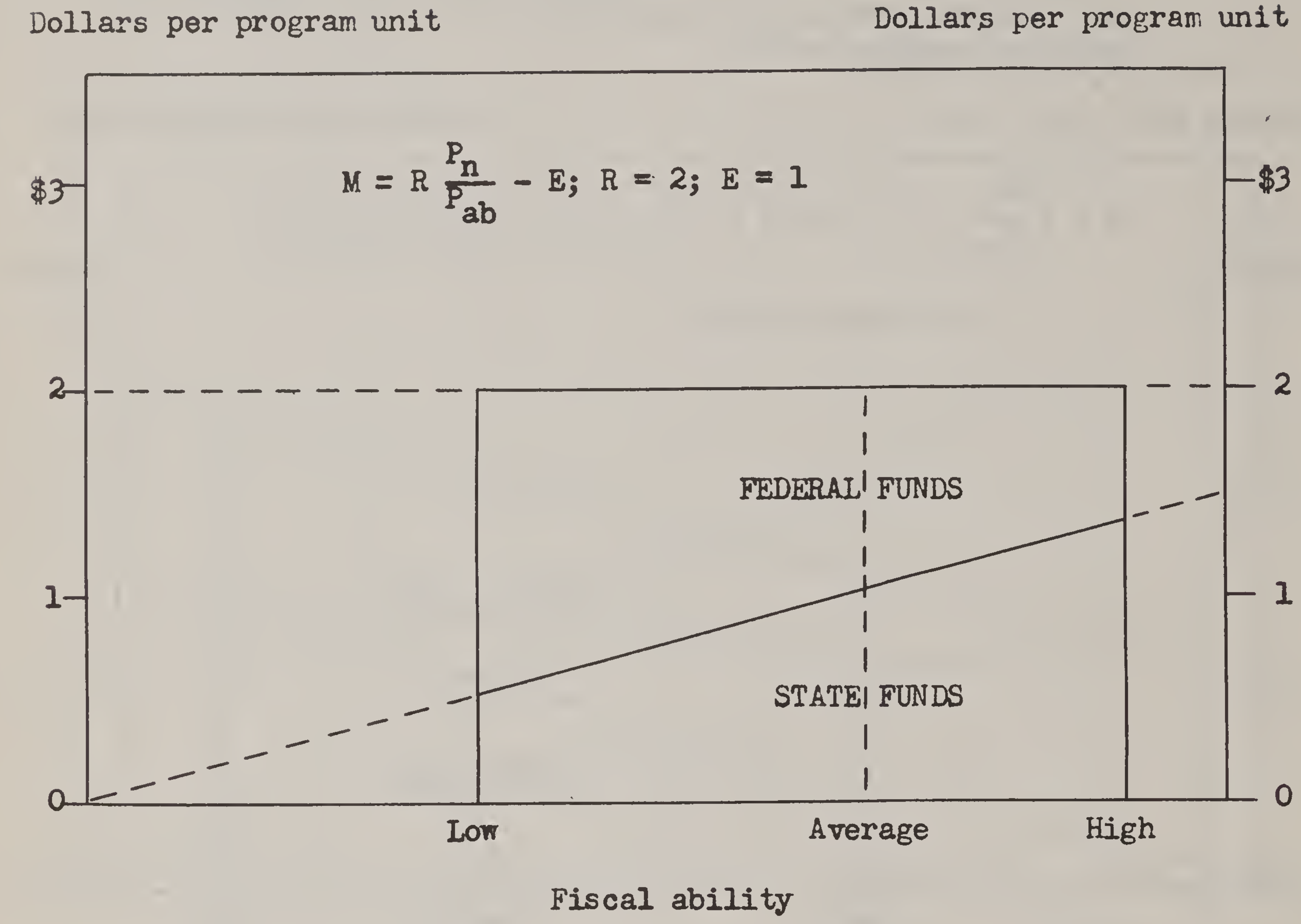
Chart 11.—Federal and State funds per program unit, when Federal aid is a uniform amount per program unit, and State funds represent uniform effort



Normally such grants would not be computed from a matching ratio, but from division of the amount of aid available by a simple count of the total number of program units; each State's share would be the product of the amount per unit thus derived and the number of program units in the State. Nonetheless, the same results could theoretically be obtained by use of this matching formula.

To complete the presentation on a basis comparable to the above, assume now a full-equalization formula, maintaining an overall ratio in the average State of one Federal dollar for each non-Federal dollar. This is the formula derived at the beginning of this chapter, and would be charted as follows (Chart 12):

Chart 12.—Federal and State funds per program unit, full equalization

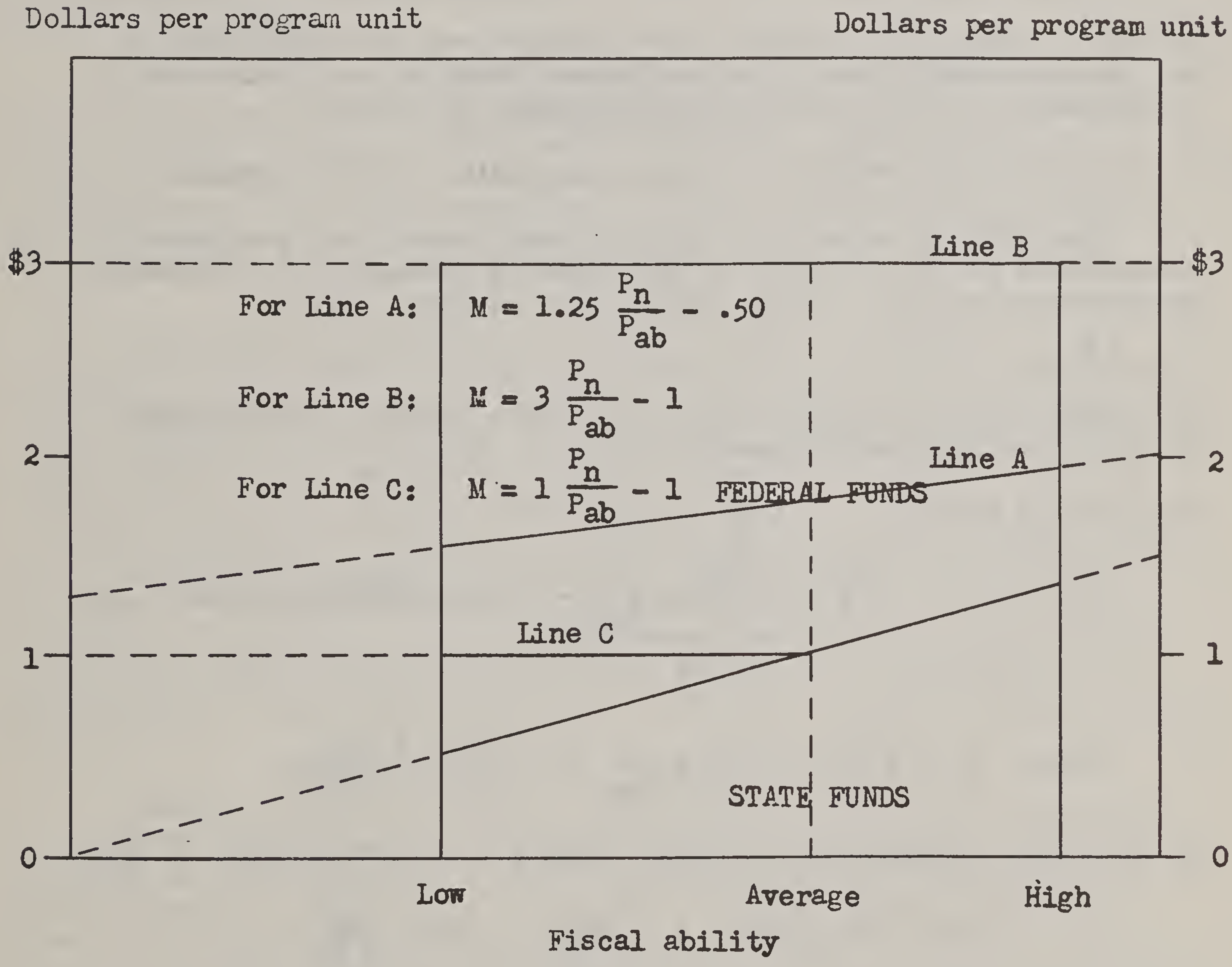


The important differences among these three alternatives are not in total costs. Each might cost about the same amount. Under the assumptions of uniformity necessary for simple diagrammatic presentation, each would cost the same. That is, the area encompassed as "Federal funds" is, in dollar terms, the same in each graph, and it is exactly equal to the area encompassed as "State funds." (Visually, the charts may appear to show that the amount of Federal funds is greater under equalization. However, the areas are not true representations of dollar values. The greater dispersion among the low-income States distorts the dollar values. Actually, the Federal-State area above the average approximates the dollar value of the Federal-State area below average.) The significant differences are in the equalization that can be achieved with the same amount of money, differently distributed.

Several other types of variations under this formula may be illustrated before turning to some alternative ways of expressing this basic formula.

In chart 13 below, line A represents partial equalization, with Federal aid equal to 75 percent of State funds. Line B represents "full" equalization when Federal support is twice that of State expenditures, and line C represents Federal aid to fully equalize the program among only those States where fiscal ability is less than the national average.

Chart 13.--Federal and State funds per program unit, under 3 alternatives



Alternative Expressions 6/ of the Formula

So far, the formula has been elaborated only in terms of matching, according to an equalization matching ratio, non-Federal funds with Federal funds. The formula can also be expressed, however, in terms of Federal aid as a percentage of total expenditure, as well as in the complementary form of non-Federal expenditures as a percentage of the total.7/

6/ Francis G. Cornell has analyzed the mathematical characteristics of the more important types of apportionment formulas in "Grant-in-Aid Apportionment Formulas" Statistical Journal, March 1947.

7/ To illustrate the derivation of such expressions of the formula:

The Federal percentage (P_F) of total Federal and non-Federal expenditures is the ratio of (M to M plus 1) (because "1" represents non-Federal money and "M" the Federal aid matching it), or

$$P_F = \frac{M}{M + 1}.$$

(For simplicity, P_F is shown here as a ratio, and must be multiplied by 100 to become a percentage.)

Substituting for M:

$$P_F = \frac{R \frac{P_n}{P_{ab}} - E}{\frac{R P_n - E P_{ab}}{P_{ab}} + 1}$$ and multiplying out P_{ab},

then: $$P_F = \frac{R P_n - E P_{ab}}{R P_n - E P_{ab} + P_{ab}} \text{ or } \frac{R P_n - E P_{ab}}{R P_n + (1-E)P_{ab}}$$

And in a full equalization formula, since $E = 1$, then $1 - E = 0$, and

$$P_F = \frac{R P_n - P_{ab}}{R P_n} = 1 - \frac{P_{ab}}{R P_n} \text{ or } 100\% - \frac{P_{ab}}{R P_n}$$

By transposing, $$1 - P_F = \frac{P_{ab}}{R P_n}$$

But the non-Federal percentage (P_{NF}) equals $1 - P_F$, or

$$P_{NF} = \frac{P_{ab}}{R P_n}$$

It is easier to express the non-Federal (State) percentage, which is, for a State, equal to the ratio of that State's percent of total ability to the product of the support level (R) and that State's percent of total need. The Federal percentage for a State is the difference between 100% and that State's non-Federal percentage. The formula is consonant with the principle that receiving jurisdictions should contribute directly in accordance with fiscal ability, and inversely in accordance with need, just as in the corollary, that Federal aid should vary directly with need and inversely with fiscal ability.

Use of the Formula

The alternative expressions can be used in a variety of ways. The matching ratio formula, for example, can be used to determine the rate at which Federal aid will match State-local expenditures from their own sources. Thus for a given State, if M equals .50, the Federal aid to that State would equal one-half the non-Federal funds; or, if M equals 1.50, Federal aid to the State would equal one and one-half times the amount of non-Federal funds.

The Federal percentage (PF) might be used, normally, to determine the percentage of the total (Federal-State-local) expenditures for which Federal aid would reimburse a State in an open-end program. Thus a Federal-aid percentage of 25 percent would mean that a State could finance one-quarter of its expenditures for the aided function from Federal funds. Another State with a Federal percentage of 60 percent would get three-fifths of its program financed by Federal aid. In a "closed-aid" program, in which the total amount of Federal aid is fixed in advance, the Federal percentage might take on additional meaning. It might be used, for example, in the allotment process as a series representing fiscal ability that influenced allocations, preferably as weights applied to the measure of need for the respective States.

Whether or not the Federal percentage is used in the allotment of a closed amount of aid, it could properly be used as the basis for matching or reimbursement of State expenditures within the limits of the allotments to each State. In other words, if the allotment to a given State were $100,000, and the Federal percentage for that State were 40 percent, then the Federal Government might reimburse the State for 40 percent of the first $250,000 it spent for the aided function. If the State spent less than $250,000, it would not use up its full allotment; on the other hand, if it spent more than $250,000, its Federal aid would be limited to the $100,000 allotment available for it, regardless of the Federal percentage.

Later chapters will illustrate in greater detail how the basic formula might be applied in each of the major programs discussed.

CHAPTER VIII

MEASUREMENT OF NEED

The differences among States in the relative need for all aided public services are probably fairly well correlated with the number of persons in the different States. Taking each program separately, many modifications can be made for differences in cost of service and for additional factors peculiar to the individual service.

General Versus Special Measures of Need

One of the troublesome questions in the design of a grant-in-aid allocation or matching formula is the choice between a generalized measure, such as total population or some segment of the population, and a special measure of need. These special measures can be made to include as many separate factors for differences in cost, availability, and extent of service as may be desired. As an extreme, the granting agency could be required by the basic law to investigate the cost of administering the service in every unit at the level that it is desired to support, and to make grants accordingly. The laws with regard to present grants for the State employment offices and for unemployment insurance administration tend toward this approach.

Proponents of each special program naturally tend to think in terms of the need for that one function, and to sponsor legal provisions and administrative regulations that assure that the grants will be allocated in accordance with the measures of need they have chosen.

Special measures of need have additional support in the pattern of State grants to local units. In many cases, the States define the content of the local programs in considerable detail. The States, for example, can require each local school district to maintain a minimum program as to the physical structures, size of class, salary scales, textbooks and courses. Similarly a State can require the local road districts to maintain roads and highways according to rigid specifications. By its very nature this procedure produces a measure of need, for the local units need an amount sufficient to maintain the prescribed program, and it is reasonable for the State aid to be fixed accordingly (including when local financial participation is required, an adjustment for differences in local fiscal ability).

Whereas State grants often accompany laws mandatory on local units, Federal grants to States are never mandatory, but rather are usually incentive grants to encourage particular services and are seldom accompanied by rigid and detailed prescription of the content of State programs. The Federal law rarely defines need in specific dollar terms. Some grant provisions do give administrative agencies the authority to modify grants according to differences in the cost of administering the service, but, as yet, cost accounting has not yet, in the field of grants-in-aid, been adequately developed.

Differences may exist in the cost of providing identical services for the same number of persons in different States, but insofar as these variations grow out of differences in the cost of living they are probably minor.1/ Differences in cost of living vary more between rural and urban areas within a State than they do among States; the rent component appears largely responsible for this differential, although it may be partly offset by other factors. Differences in "levels of living," or living standards are often confused with differences in cost of living. The Federal equalization interest would, if adequate data were available, take account only of the differences in cost of maintaining the same standard of living throughout the country.

Insofar as cost differences arise out of differences in density of population, they have significance, within limits. There is a clear relationship between population density and the per capita cost of some services. Up to a certain point, the cost, per person served, of a mile of road, sewer system, water main, telephone, or other public utility, decreases as density increases. But there is a point of diminishing returns in most such cases and a complete reversal of the cost curve when density becomes "congestion."2/ Thus the per capita cost of roads and thoroughfares in large cities has become exceedingly high, and many factors combine to make other structural costs higher in densely populated areas; not the least of these factors is the high cost of land and rents.

For personal services, the effect of differences in density on costs is not nearly so important. These services are often rendered at central points, with the recipients bearing most of the expense of travel time and transportation, or the service may be rendered by mail; in any case, the additional costs may be a very small part of the total cost of the service.

In making grants for public health and maternal and child health programs, some attention has been given in past years to population density. The validity of the measures and procedures used was open to question, and the practice appears to have been abandoned.

1/ State and local governmental salary scales differ among States, but these do not truly reflect cost-of-living differentials.

2/ Berolzheimer, Josef, "Influences Shaping Expenditures for Operation of State and Local Governments--Relation of population to expenditure variation." The Bulletin of the National Tax Association XXXII, No. 6, pp. 170-177, March 1947.

In any event, no precise measure has yet been developed for taking account in grants of differential costs of rendering the service. Even when the law has included this factor directly, as in the provisions of the Social Security Act that grants for services to crippled children should take into consideration the cost of furnishing these services, the administering agency has not found it possible to include a direct measure of the cost differences in making allocations, but instead has used indirect measures, thought to reflect cost differentials.

General measures of need avoid the problem of circumscribing administrative discretion in applying special measures and thus are more objective and less subject to pressure. General measures do not occasion so many differences in the same State's share of different Federal aids, which disturb effective administration. General measures are more readily adapted for use in making grants for broadly defined functions and can simplify integration of special programs in the same broad functional area. Special measures tend to be narrowly drawn and to perpetuate the special segment of the function for which aid may originally have been given.

For these and other reasons that are developed later, general measures of need are preferred over special measures in the allocation of Federal aid to States. As previously indicated, special measures may in some instances be preferred in making State grants to local units.

Whichever is used is dependent also on the adequacy of the alternatives available, and may vary from program to program.

Measuring Need for Welfare Aids

So long as Federal welfare aids were confined to very small groups of the population, which are readily identifiable, the number of disabled soldiers in State veterans' homes, for example, it was appropriate in apportioning aids to use the number in such group in each State and a uniform cost figure. But with the advent of the Social Security Act, the problem arose as to measurement of need for public assistance. The act avoided the problem by the expedient of offering to pay half the expenditures, within specified limits per case per month, made by States with respect to certain identifiable "categories." Thus the Federal Government has set outer limits to the measurement of need and offers to recognize as need as many recipients and as much money as the State sees fit to include within the age, residence, and amount limitations. Federal assistance grants do not recognize any other differences in need for welfare aids, or in fiscal ability.

In studying possible alternatives to the present open-end reimbursement basis, one is faced with the fact that there seem to be differences among States in the level of need in relation to population. Recipient rates, as chapter V indicates, vary considerably among States. Thus the number of needy aged is not only related to the number of aged in each State but, as one might expect, tends to be proportionately larger in lower-income States.

An "income deficit" measure.—It is occasionally proposed that an "income deficit" measure be used to determine need for public assistance.[3] The procedure used would first require an income distribution by income class and by size of family for each State. Then some point might be chosen, say $500 per capita [4] (which is equal to the present personal exemption for Federal income tax purposes), as the point below which to begin to measure public assistance need. The index of need in each State would be the difference between the amount of income available to persons in families with incomes below $500 per capita and the product of the number of such persons multiplied by $500. Such a plan suggests the concept of a guaranteed minimum income but would not require that States actually maintain such a minimum; the plan is merely a technical method for measuring (presumptively) differences in relative need for public assistance.

As an alternative to the $500 annual income dividing point, the plan could use 12 times the maximum monthly payment for which there is Federal assistance. Before October 1946 this would have been $480 per adult per annum; now it would be $540 per adult (using figures for old-age assistance and aid to the blind). If a lesser amount than that for adults is defensible for dependent children, as present Federal maximum shares of aid to dependent children implies, something approximating at least $20-25 a month might be used. Also, spokesmen for the blind declare that blind persons need greater income. A recognition of such differences in a dividing line would imply a recognition of the continuing existence of the special categories, and the question arises as to whether need is to be measured separately for each of the three programs. If so, income deficits of the aged, the blind, and dependent children must be computed separately. In terms of the formula in chapter VII, it is highly likely that any one State would have different proportions of the total need (P_n) for each of the three programs. Furthermore, if the Federal Government were to measure need by this "income deficit" procedure for each category, it would require income data not only by income class and size of family, but by age of members of each family and for the blind, by degree of blindness.

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[3] This proposal may have grown out of unpublished memoranda written by Julius T. Wendzel, who outlined an "income surplus" concept related to a "subsistence limit" of "minimum living costs". Mr. Wendzel was with the Division of Economic Studies, Bureau of Research and Statistics, Social Security Board, from July 1936 to February 1939.

[4] Cost-of-living differences (apparent or real) have suggested to some persons that the measuring point for minimum income be adjusted from State to State. These differences, however, are too small, too subjective, and open to too many objections to warrant their inclusion here and are not essential to the discussion at this point. If they can be established and measured, they can be used to modify this method.

If Federal aid for public assistance continues on an open-end basis, it can take account of differences in need and fiscal ability without an allotment formula, merely by varying the matching percentages, in accordance with the equalization formula given in chapters VII and X. In this case, if the measurement of need is to vary from category to category, there will be differences in the Federal share of the cost among programs in the same State. This could lead to undesirable competition among programs and would be unnecessarily confusing to State and local officials and to the public generally.

The only satisfactory way to avoid such competition and confusion while retaining the "income deficit" approach is to measure total need for public assistance and apply the measure uniformly to the three public assistance titles, or to a unified public assistance title if such should be adopted.

For the present, an "income deficit" plan for measuring welfare need appears academic, since available income data are not sufficiently complete to warrant their use. If the law were to require such a measure, and if filing of income returns were compulsory for every family regardless of income, then such a measure could be computed with considerable accuracy.

Other measures.—It has occasionally been suggested that certain economic, housing, or other social data could be used to measure differences in need for welfare purposes. No doubt the number of telephones, automobiles, bathtubs, and sundry other measurable items correlates to some inverse extent with need for public assistance. But until one has a true measure of need for public assistance, there is no way of knowing how well such measures as are available do in fact correlate with need for public assistance. Each such series is an approximation at best, because each is influenced by other considerations, such as the degree of rurality or urbanity, that may have no direct relationship to need for public assistance.

One can be sure that the total amount of need for public assistance and other welfare programs is directly related to the number of persons in each State. Therefore, total population is a good basic measure of need.5/ Ideally, there should be some weighting factor applied to population to adjust for State variations in income levels and in the incidence of poverty. Any present adjustment would probably be subjective and, until better income data are available, would be difficult to test for accuracy. Therefore, total population, without further modification, seems the most acceptable present measure of need for

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5/ Wueller, Paul H., "Elements of a Variable-Grant Formula" Bureau of Research and Statistics Memorandum No. 54, Social Security Board, Nov. 1943. pp. 13-14.

all three public assistance programs, and for general assistance if aid in that program is granted by the Federal Government. As better measures are developed, they can be reviewed for use in equalization grants.

Measuring Need for Public Health

The existing variety of public health programs creates a difficult problem in measurement of need. Each new special (as opposed to general) health program tends to measure need for the special program in allocating the special aid.

The measurement of need for public health services, judging by present legislation, contains two problems: (1) a proper measure of need for general public health services,6/ and (2) a proper measure of need for special public health services. A number of "earmarked" health aids already exist, including those for crippled children, venereal disease prevention and control, tuberculosis prevention and control, maternal and child health, cancer prevention and control, mental hygiene, as well as vital statistics collection, tabulation, and analysis.6A/ The "size of the health problem" associated with each of these specialties has a differing incidence among States depending on the effectiveness of past programs dealing with these problems, degree of industrialization, and in some cases perhaps climate or other natural conditions.

The special health programs seldom seem to rely upon any measure of the need for the general health program. For several of the special programs there exist considerable statistical data as to the extent of the problem, as, for example, in the case of tuberculosis. Experts in these specialties are very conscious of the limitations of such series, however, and similar statistics in some of the other specialties are shaky or completely useless. Some deficiencies in health statistics can perhaps be improved; for example, uniform definitions of what constitutes crippling among children, if uniformly applied across the Nation, should yield usable data. But one may never be able to measure with assurance the need for mental health; during fiscal 1948, the Public Health Service assumes total mental health need as equivalent to total population, and measures need for Federal aid according to the "deficit" between existing State-local facilities and those that would permit a uniform standard of out-patient care equally throughout the country.

Until cancer diagnosis and reporting are improved, special measurement of need for cancer control is uncertain. Morbidity data are

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6/ A definition by exclusion would make general public health services all public health work except that aided under special grants.

6A/ Federal expenditures in support of State vital statistics activities are not grants-in-aid as defined in this study.

available for some States, and mortality data of varying accuracy are available for all States.

The law now allows the Public Health Service to vary grants for general public health services not only according to population and financial need but also to "the size of the health problem." When grants are by law specifically directed to the correction of a particular health condition, as for tuberculosis or veneral disease, it may be appropriate that the latter factor be given consideration. In making allocations for general public health purposes, however, a special measurement of "size of the health problem" in addition to population raises conceptual and statistical questions. Conceptually, public health is, or ought to be, now beyond the stage where one thinks of its task largely in terms of deaths from certain preventable communicable diseases. When its task was construed in such narrow terms, "the size of the health problem" was something different from the size of the community. But now public health intends to safeguard the health of the entire community, especially from public hazards, and also from personal hazards. It is engaged in health education and sickness prevention on a broad front, in fact, on practically all fronts impinging on health; therefore, it is reasonable to hold that the size of the health problem varies directly with the population, and thus justify dropping from the measurement of need for general public health services any special measure of health problems.

Ignoring conceptual problems for a moment, if Federal law should continue to call for the use of "the size of the health problem," a measure might be based on illnesses and/or deaths from all causes except those that will not be affected by the general public health program. The Public Health Service now takes into consideration mortality from parasitic and infectious diseases, pneumonia, and cancer, excluding venereal disease, tuberculosis, and influenza. The Children's Bureau has, in the past, taken into account the infant and maternal mortality.

The actual number of births and deaths, and the true number ill from various diseases in each State, reflect to a considerable extent the size of the population of the State, as shown by the fact that birth, death, and general morbidity rates have a somewhat limited variation. For example, although the extreme birth rates in 1941 varied from a low of 15.6 per 1,000 population in New York to a high of 27.7 per 1,000 in New Mexico, yet 37 States had rates between 16.9 and 22.9. Similarly, death rates varied from 8.21 per 1,000 in Utah to 12.41 per 1,000 in Nevada, yet 39 States had rates between 8.7 and 11.7. Specific morbidity rates will, of course, show greater deviation, since health hazards from many specific diseases vary with climate, water supply, sanitary facilities, insect life, and the like.

Thus, the number of births, deaths, and cases of certain diseases (assuming equally good morbidity data were available State-by-State) could be used to measure the size of the health problem, without in effect duplicating the allocations based on population alone. The equity of such an allocation might be increased by the use of a weighted composite of mortality, morbidity, and natality statistics as a measure of the size of the health problem. The logic of such a combination is that public health need is like private health activity, somehow more intimately related to the newborn and their mothers, the ill and the dying, than to the population as a whole.

The weakness of the approach is: first, that the birth and death statistics are largely a reflection of size of population, and thus for most States would make little difference in the resulting allotments; second, that consistently good morbidity data usable for purposes of allocation do not now exist; and third, that public health work is not strictly comparable with private health activity. Public health has a responsibility which extends to the entire population regardless of age, sex, and present state of health. A fourth possible objection to the use of such statistics is that the definition of what is to be included may become a subject of controversy to the extent that inclusion or exclusion of, say, illnesses from one specific disease would excessively influence the allotments toward a particular State. Finally, the weights to be assigned the various factors could also be a subject of debate, since exact cost analysis of public health services for each segment of the work is not now available or readily feasible.

The one common thread through all the special health programs, equally applicable to the general health program, is that need correlates fairly well with population alone, especially if one takes need for all health services in the aggregate rather than for each individually. The differences in each State's share of special health aids now lead to confusion and complaint. Uniform use of population as the basic measure of need for health programs would probably do little harm to equity and should promote better Federal-State relations.

Population, therefore, remains an acceptable and objective measure of need for general public health services and of the size of the health problem. As a measure of need for the aggregate of special public health services it is also by the same token acceptable, even though one can recognize modifications with respect to a particular special health service. The State and Territorial Health Officers in their December 1946 meetings expressed the hope that in the future the public health grant structure would move in the direction of greater aid to the general program, with decreasing emphasis on special Federal aid to special health services. The more widespread the use of one measure of need (namely, population), for all health purposes the easier will be the transition from grants for special to those for general programs.

If grants for public health services grow larger, it will become increasingly important for all concerned to have measures of need that are relatively simple, objective, and consistent from year to year. Population is such a measure. However, as long as special measures of need for special programs persist, it is still possible to combine them with measures of fiscal ability in an equalization allocation.

Measuring Need for Education

The proportion of the population that is of school age varies considerably from State to State, as shown in table 14. For this reason most writers on aid to education believe that total population is not sufficiently accurate as an index of need for education, and that refinement at least to the extent of using population of school age is to be preferred. Their point is given added emphasis by the fact that the States with the higher proportion of population in the school ages are also the States with low incomes per capita and therefore most likely to need Federal assistance. To use total population rather than population of school age in an allocation formula, they say, would disadvantage the States most in need.

However, attendance at school of children of school age varies considerably among States for many reasons. Therefore, some declare, it might be preferable to use school enrollment, or even better, to use total attendance or average daily attendance in measuring need. The proponents of spending the largest part of the proposed Federal aid in the States most in need reply that these refinements of measures may hurt the poorest States most, because for economic and other reasons the low-income States have a less favorable attendance record. On the other hand, the use of State attendance data would, it is argued, be a direct stimulus to better attendance laws and better enforcement thereof. Since the attendance data are collected by the State agencies, Federal grants, if made, would rest on data of doubtful comparability.

In any case, all agree that some kind of population measure is basic to measurement of need for educational aid. Mort, et al.,7/ list several factors they believe should be used to modify a measure of need for education grants, because these affect the cost of education. These include population density, cost of transportation of pupils, cost-of-living differentials, and differences in the cost of elementary and of secondary schools. In general, in measuring population density they would relate improved farm acreage and rural population only, a great improvement over the more common approach that includes in an area adjustment millions of acres of mountain and desert wilderness and often the area of bodies of water as well. Transportation costs can be included in an index on an "as-spent" basis, although this penalizes poor States not yet providing adequate transportation.

7/ Mort, Paul R., together with Francis G. Cornell, David P. Harry, Eugene S. Lawler, Mabel Newcomer, Alfred D. Simpson, and others, Federal Support for Public Education, Columbia University, 1936. Chapter V.

Table 14.--Relationship of school age population to total population, by State, 1940

State ranked by 1943-45 per capita income	Total population, 1940 census	Population aged 5-17, 1940	School age population as percent of total	Index of variation, i.e., relation of percent of school age population in State to U.S. average
Continental U.S. and Territories......	134,111,100	30,499,746	22.74	100
High-income group..........	70,921,356	14,441,131	20.36	90
New York...............	13,479,142	2,601,590	19.30	85
Connecticut............	1,709,242	344,515	20.16	89
California.............	6,907,387	1,227,881	17.78	78
Washington.............	1,736,191	328,992	18.95	83
Delaware...............	266,505	54,564	20.47	90
New Jersey.............	4,160,165	838,186	20.15	89
District of Columbia.....	663,091	105,552	15.92	70
Nevada.................	110,247	20,624	18.71	82
Illinois...............	7,897,241	1,556,549	19.71	87
Oregon.................	1,089,684	209,082	19.19	84
Massachusetts..........	4,316,721	887,906	20.57	90
Ohio...................	6,907,612	1,443,268	20.89	92
Michigan...............	5,256,106	1,167,804	22.22	98
Rhode Island...........	713,346	151,073	21.18	93
Maryland...............	1,821,244	395,124	21.70	95
Pennsylvania...........	9,900,180	2,245,015	22.68	100
Indiana................	3,427,796	740,020	21.59	95
Montana................	559,456	123,386	22.05	97
Middle-income group........	19,951,024	4,492,572	22.52	99
Wisconsin..............	3,137,587	699,929	22.31	98
Kansas.................	1,801,028	402,469	22.35	98
Maine..................	847,226	198,867	23.47	103
Nebraska...............	1,315,834	302,544	22.99	101
North Dakota...........	641,935	168,424	26.24	115
Iowa...................	2,538,268	555,068	21.87	96
Utah...................	550,310	149,059	27.09	119
Wyoming................	250,742	57,848	23.07	101
Colorado...............	1,123,296	251,845	22.42	99
Idaho..................	524,873	129,044	24.59	108
Missouri...............	3,784,664	806,208	21.30	94
Minnesota..............	2,792,300	611,907	21.91	96
South Dakota...........	642,961	159,360	24.79	109
Low-income group...........	40,796,895	10,811,585	26.50	117
Vermont................	359,231	82,099	22.85	100
Florida................	1,897,414	424,068	22.35	98
Texas..................	6,414,824	1,601,087	24.96	110
Arizona................	499,261	129,590	25.96	114
New Hampshire..........	491,524	104,903	21.34	94
Virginia...............	2,677,773	688,614	25.72	113
Oklahoma...............	2,336,434	608,627	26.05	115
West Virginia..........	1,901,974	521,781	27.43	121
Louisiana..............	2,363,880	615,384	26.03	114
New Mexico.............	531,818	152,346	28.65	126
Tennessee..............	2,915,841	755,506	25.91	114
Georgia................	3,123,723	837,040	26.80	118
Kentucky...............	2,845,627	756,229	26.58	117
North Carolina.........	3,571,623	1,026,826	28.75	126
Alabama................	2,832,961	799,238	28.21	124
South Carolina.........	1,899,804	562,097	29.59	130
Arkansas...............	1,949,387	530,264	27.20	120
Mississippi............	2,183,796	615,886	28.20	124
Territories...............	2,441,825	754,458	30.90	136
Alaska.................	72,524	16,262	22.42	99
Hawaii.................	423,330	119,928	28.33	125
Panama Canal Zone.......	51,827	9,449	18.23	80
Puerto Rico............	1,869,255	602,438	32.23	142
Virgin Islands..........	24,889	6,381	25.64	113

Mort takes account of cost-of-living differences by adjusting upward the index of need for larger cities. He suggests adding 15 percent to the measure of need in places of 10,000—30,000 population; 20 percent in places of 30,000—100,000; 25 percent in cities of 100,000--500,000; and 30 percent in cities over 500,000. Certainly new studies should be made to check the exact size of the differences, if adjustment is to be made for such differences. Mort's adjustment approach is in keeping with available evidence as to cost-of-living differences, even if the specific values for the various adjustments are open to question. Critics of Mort's proposal, who wish to aid the low-income, rural States more than the high-income, urban States, will protest that this adjustment operates to weaken or defeat their purpose in supporting Federal grants to education at this time. Students of cost-of-living differentials may have some reservations about the adequacy of existing data for measurement of these differences. Mort makes it clear that he is concerned only with the way these cost-of-living differences affect the cost of offering an educational program, which may simplify measurement of the differences.

Secondary schooling costs more than elementary schooling, and an adjustment for these differences is on sound theoretical ground. The trend toward universal high school education has continued to the point where the range in percentages of children of high school age in high school in different areas has been considerably narrowed. Time was when this adjustment would have greatly favored the urban areas and disadvantaged rural and low-income areas; an urban margin of advantage still exists.

If school-age population rather than attendance data are used, this last adjustment is not so important or necessary. The adjustment would then serve merely to give greater weight to the population in the upper end of the age distribution, and the ratio of this segment to the other segment does not change materially from State to State.

These adjustments listed by Mort are relevant and have been used in measuring local need for purposes of State grants. However, authors of recent bills to give Federal aid to States have tended to use very simple and objective measures of need for Federal-aid purposes. They have preferred to use Census rather than State educational agency data on the school-age population, because of the greater objectivity and comparability of the former. Whether they have deleted the cost adjustments because of the feeling that these involve subjective judgment and undue complexity, or because they believed that the adjustments would, on the whole, tend to divert more Federal funds to areas less in need of aid, is not known. In either case the resulting approach agrees with the philosophy of need measurement expressed in this paper.

Many of the cost adjustments discussed above, such as the measure of school-age population, density, and transportation costs, might, if used, influence the future course of the States in administering their school systems. If so, such adjustments would violate the traditional principle that Federal aid for education should not result in Federal interference with State and local control over education.

Statutory Versus Administrative Measurement of Need

In any grant-in-aid program, there must be a measurement of differences in need in one way or another. It can always be argued that simple and rough measures of need, such as population or some variant of it, do not mete out exact justice, and that the Federal law ought to permit the administrative agency to introduce refinements--either those specified by type in the law, or whatever refinements the agency believes proper.

As chapter IV demonstrates, Federal law often provides a statutory definition of need, and the administrator has no choice but to allocate funds according to the statistical data pursuant to law. On various occasions, however, administrators have been given discretion to measure need, sometimes by specified factors, sometimes apparently without limit. Two different types of grant-in-aid situations can be distinguished that may help to explain these divergent choices. When large amounts of money are to be distributed annually among States, for generalized programs, it seems appropriate to provide by statute how need should be measured. On the other hand, when small amounts of money are made available for specialized purposes or when the duration of the grant is limited or doubtful, it may be appropriate to give the administrative agency some degree of freedom in making allotments from these funds to States. Even in these cases, however, the divergent pressures on the administrator would be minimized if the Federal law specified what types of factors he should consider in measuring need.

There may remain a number of grants that do not fall within any such clear extreme groups. If, at the time additional aid is being granted, the only measures of need available are known to be weak and it seems desirable to permit leeway for experimentation, discretion, and development of adequate measures of need, then the proper course is to grant discretion; perhaps the administrator could be required to report back at a stated future time on his findings and recommendations for a statutory measure of need. On the other hand, if the difference between a statutory measure of need and an administrative measure is merely one of hairline refinements, the choice should go to the statutory measure. It is true that once the law embodies a statutory measure of need, few changes are made, but as appendix B indicates, enough changes have been made so that this should not be a major argument against a statutory measure. As a general principle, all doubts should be resolved in favor of the statutory measures.

CHAPTER IX

MEASUREMENT OF FISCAL ABILITY

History of Alternatives

When the property tax was the mainstay of State as well as local tax systems, it was common to compare the relative fiscal abilities of the several States according to assessed valuation, valuation per capita, or estimated "wealth." States differed, however, in the ratios of assessed to true valuation, and it was not readily possible to obtain comparable statistics for all States.

In 1932-33 the Model Tax System was devised by a committee of the National Tax Association.1/ This plan stimulated several attempts to measure differences in State fiscal abilities according to the yield of such a model system, with uniform rates.2/ Such studies were admittedly a bit subjective and arbitrary. Furthermore, they suffered the common drawback of lack of adequate statistics, even assuming that perfect agreement were reached with respect to the design of the model system.

Other ventures in the field of measuring State fiscal ability dealt with sundry series of economic and social data that would be indicative of income and wealth. In an unpublished study made for the Bureau of Research and Statistics, Social Security Board, in March 1938, Mushkin and Gerig examined 25 such indexes, including postal receipts, number of income tax returns, retail sales, life insurance in force, bank deposits, gasoline consumption, telephone calls, value of tangible property, and value added by manufactures. This study concluded on the same note that other similar studies have sounded, "that there exist tremendous differences in the economic levels of the various States." The study also found that "consistency in the rankings of the States is indicated by most of the indices and would be achieved if the few series with marked peculiarities were excluded."

The earliest work on State income payments was supported by the newly organized National Bureau of Economic Research.3/ Additional work

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1/ National Tax Association, NTA Proceedings, 1933; also Second Report of a Plan of a Model Tax System of State and Local Taxation. Wickersham Printing Co., Lancaster, Pennsylvania, 1933.

2/ See especially Leslie L. Chism, The Economic Ability of the States to Finance Public Schools, Columbia University, 1936; and Mabel Newcomer, associated with Paul Mort and others in Federal Support for Public Education, op. cit.

3/ Knauth, Oswald, Distribution of Income by States in 1919; also, Leven, Maurice, and King, Wilfred I., Income in the Various States, Its Source and Distribution, 1919, 1920, and 1921, National Bureau of Economic Research, 1922 and 1925.

was carried on by the Brookings Institution,4/ and later by the National Industrial Conference Board.5/ The Social Security Board prepared income payments estimates by States for inclusion in "Fiscal Capacity of the States--A Source Book."6/

By 1939, the Department of Commerce had undertaken to prepare official estimates of State income payments to individuals and of per capita income for each State. The Department has prepared estimates for every year for every State from 1929 to date.7/ These series have been constantly revised and improved, the revisions growing out of refinements in concept, more complete data, and improvements in methodology.

Studenski and others have urged the development of an income-produced series to accompany the income-received series now available.8/ Such a series would have general economic utility and might be helpful because State fiscal ability reflects in part the State's ability to tax production. If a choice must be made between the two, however, it seems better to use income payments to individuals rather than income produced as the measure of fiscal ability. Apart from present availability of the series, that choice would be far better supported by the ability-to-pay principle and by a preference for direct taxation.

4/ Leven, Maurice, and Warburton, Clark, America's Capacity to Consume, The Brookings Institution, 1934.

5/ Slaughter, John A., Income Received in the Various States, 1929-1935, National Industrial Conference Board, 1937; also in Conference Board Bulletin, April 19, 1937. The NICB continued to prepare and publish State income estimates until 1942.

6/ Bureau Memorandum No. 29, April 1938, prepared under the direction of Paul H. Wueller and T. C. Blaisdell, Jr., with the advice of Robert Nathan as to income estimates; also Bureau Memorandum No. 43, January 1941, prepared under Daniel S. Gerig, Jr., with Paul Studenski and Paul H. Wueller as consultants.

7/ The detailed work has been, successively, under the immediate supervision of Robert R. Nathan and John L. Martin (1939-1940), Frederick M. Cone (1941), Daniel Craemer (with Charles Merwin-1942; and with Charles Schwartz-1943), and since 1943, Charles Schwartz. All work has been done under the National Income Section of the Department.

8/ Studenski, Paul, Measurement of Variations in State Economic and Fiscal Capacity, Bureau Memorandum No. 50, Bureau of Research and Statistics, Social Security Board, Federal Security Agency, Washington, March 1943. Professor Studenski wished to see additional study given to income produced by States, since State and local tax systems derive a large portion of their revenues from taxation of business property and business enterprises owned by nonresidents as well as residents. He felt such a series might be combined with the series on income received, the latter to have the greater weight because of its greater reliability, to secure an index of fiscal capacity.

Studenski's alternative suggestion, to use both series and give greater weight to income payments, may be a better theoretical answer. Apart from the fact that income produced is not yet measured on a State basis--and to do so would present substantial problems in allocation of production when the process of production involves several States--there is the pragmatic question as to the desirability of asking legislators and the public generally to understand and accept a dual measure and to accept the weights which might be assigned to each. Whether for lack of data or for reasons of principle, contemporary legislation which seeks an objective measure of differences tends to accept the income-payments index.

Official figures on State per capita income are now available for every year from 1929 through 1945, covering periods of boom, depression, recovery, slump, wartime prosperity, and reconversion. During these 17 years there have been great shifts in the general level of income payments, but, with minor exceptions, the rankings (based on moving 3-year averages) of most of the individual States within the range of per capita income payments have not changed greatly from year to year; only eight States have had annual changes of more than four places in rank in any single year. Wide differences between rich and poor States appear in every year. Table 15 shows the highest and lowest State per capita incomes and the national average for each of the 17 years as well as the relative and absolute ranges. Except in the war years, the per capita income in the richest State has generally been at least five times that of the poorest State. Even in 1945, when the poorest State had a per capita income of $556, the richest State had $1,595, or nearly three times as much. The absolute range between the highest and lowest State has varied over the years from $683 in 1933 to $1,039 in 1945.

With continuing improvements in techniques and statistics for measuring income payments to individuals in each State, more and more workers in this area of fiscal ability have come to endorse the use of income payments as a measure of fiscal ability.

Income Payments to Individuals

Advantages as an index of fiscal ability.--One of the virtues of the income payments index is that it is readily understandable. Most people now recognize the merit of the argument that all taxes tend to come out of income, and that income payments to individuals represent, therefore, a reasonable index of ability to support the cost of governmental services.

Furthermore, it is more comprehensive than many other indexes, for it attempts to include all types of income, both in cash and in kind. It is free from the subjectivity associated with many of the earlier alternatives. This objectivity becomes increasingly true as more complete and reliable data (often of a census type) on income and wages are made available in the normal course of operation of various

Table 15.--Range in State per capita income, 1929-45 1/

Year	National average per capita income	Lowest State per capita income	Highest State per capita income	Relative range: Ratio of highest per capita income to lowest	Absolute range: Difference between highest and lowest per capita income
1929.....	$680	$252	$1,191	4.7	$939
1930.....	596	191	1,179	6.2	988
1931.....	500	143	1,088	7.6	945
1932.....	380	125	926	7.4	801
1933.....	368	123	806	6.6	683
1934.....	420	162	876	5.4	714
1935.....	460	177	955	5.4	778
1936.....	531	218	1,124	5.2	906
1937.....	561	207	1,107	5.3	900
1938.....	509	185	1,044	5.6	859
1939.....	539	201	1,031	5.1	830
1940.....	575	202	1,080	5.3	878
1941.....	693	283	1,101	3.9	818
1942.....	862	396	1,305	3.3	909
1943.....	1,040	483	1,479	3.1	996
1944.....	1,133	541	1,519	2.8	978
1945.....	1,150	556	1,595	2.9	1,039

1/ Derived from data in Survey of Current Business, August 1946, p. 16.

governmental programs, such as social insurance. These developments increase the reliability of the income-payments series, which in turn increases its acceptability among all types of users, including legislators, economists, statisticians, Government officials, and the public generally.[9]

Whether expressed in total dollar terms, or in terms of dollars per capita, it yields meaningful figures that are readily understood. It is free from the confusion commonly associated with index numbers, especially weighted and composite indexes, and it permits immediate and general comparisons among States. Wealth indexes, especially to the extent that they relied heavily on property assessments, were under a cloud of probable noncomparability, whereas most of the basic series for the income payments estimates are collected nationally and are national in scope.

Limitations and disadvantages.--Some of the various limitations noted in the past as to the income-payments series have been overcome by refinement of concept, better basic data, and improved methodology. Farmers' income in kind, for example, is now being included in the series. Within the next few years the series will begin to include the imputed rental value of owner-occupied homes.

On the other hand, some of the alleged limitations may never be overcome, and perhaps never should be. For example, a classic complaint is that no value is given to the services of a housewife, even though payments to housemaids by householders are included. The human race performs many services for itself, and sometimes grants compensation for these services but often performs them for love rather than money.

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[9] For example, the Committee on Intergovernmental Fiscal Relations found that income payments are "the generally accepted test of ability." After recounting some of the limitations discussed in detail in the Studenski memorandum (cited above), the Committee reports, "Nevertheless, none of the limitations on per capita net income received offer a conclusive argument against using it as the basis for the distribution of differential aids" and, "on the score of simplicity and objectivity, the per capita income method has quite convincing advantages." From Federal, State, and Local Government Fiscal Relations, op. cit., pp. 171-173. Also see "Income and the Measurement of the Relative Capacities of the States," by Paul H. Wueller (and the discussion by others), in Studies in Income and Wealth, Vol. III, National Bureau of Economic Research, New York, 1939.

Any calculation of their worth would be subjective, and to include such items as income might discourage many innocent forms of production and human enjoyment. It is sufficient merely to note the complaint that income is understated by the present series, and not ask for an attempt to correct the series for all the possible types of imputed income. Furthermore, for most purposes it is relative fiscal ability, not absolute amounts, that is important; a fairly constant error or bias can therefore be ignored.

A question might be raised as to the reason for including imputation of value to goods consumed on the farm, and of house rental value to the owner-occupant. The answer is that equity as between the type of farmer who devotes all his time to a cash crop and buys his food, and the type of farmer who devotes a significant part of his time to providing his own food and therefore produces a smaller cash crop, demands the first adjustment. The second is one of fairness between predominantly rental and predominantly owner-occupied areas. Both the farmer who consumes part of his crop and the householder who occupies his own house have assets that are commonly found in the market--so that each has objectively measurable assets upon which he could as easily realize a measurable cash income. This is not the case for most other forms of imputed income; hence the inclusion of these two and the exclusion of the others.

That State and local tax systems are not likely to reach every dollar of income payments must be admitted as a limitation. However, income payments are proposed as a measure of the total economic base available to every State to support government and public services. It is immaterial to that purpose that States do not uniformly tax this base in actual practice. Moreover, if the States would follow the Federal lead in broadening the income-tax base, this limitation would be still further weakened.

Similarly, it must be admitted that some States and localities can tax transactions or income not normally credited to their residents, and that therefore income payments are not a wholly adequate measure. The taxation of capital stock by Delaware and of stock-market transactions by New York illustrates this point; the most common type of tax on nonresidents may be the taxation of property owned by them. It is quite likely that, as between States, most such differentials may tend to cancel out, although some critics will insist that there will be a net residue in favor of the various "financial centers." Chain-store taxation is evidence of the strength of this latter sentiment, as is discriminatory State insurance taxation. But the very existence of these counter-weapons illustrates that State and local tax systems are flexible and do tend to compensate for such real (or imaginary) inequities.

One critic has attacked the per capita income series because "it includes every baby in swaddling clothes as equal to every adult." Two comments should be noted as to this supposed limitation. In the first place, strictly speaking, total income payments to individuals within a State are the measure of total ability, as here interpreted. The equalization formula described in chapter VII would normally include the use of such totals as measures of fiscal ability.

When total income payments are divided by population, they yield the per capita income series commonly used to represent relative fiscal ability, in index fashion. Strictly speaking, a per capita income series in an equalization formula combines total income payments as a measure of ability with population as a measure of need (discussed in chapter VIII), so as to yield a composite measure of both. The mathematics of this will be developed more fully in the next chapter.

In such a context, however, it makes but minor quantitative difference to a measurement of relative fiscal capacity if income payments are divided by total population, population weighted for differences in the cost of maintenance of children, or population excluding persons under 14 years of age, or by the number of employed adults or of members of the labor force. In some methods the range between States tends to be heightened slightly, in others it may be compressed slightly, but the relative differences will still be apparent and will still be great.10/ Table 16 illustrates the application of these alternative ways of measuring relative fiscal capacity for the year 1940 (because the necessary census data relate to that year). Few States change substantially in rank from one measure to the next. Table 17 shows the Federal percentage that would result under the basic equalization formula of chapter VII, using the data from table 16, using per capita income as a combined measure of need and ability.

Possible improvements.--Subsequent investigation in this field might well consider certain other limitations of the income-payments series. With better measurement, it may be that substantial improvements could be made in the series that would result in greater equity.

Since taxes paid to all governments are ignored in the income series, income payments reflect income of individuals before taxes. It would, of course, be idle to subtract the State and local taxes paid 11/

10/ Unpublished analysis by Alexander Gall, Bureau of Research and Statistics, Social Security Administration.

11/ Other users may desire to have the income payments series corrected for all taxes paid, so as to have a "disposable income" series, a measure of income available for private consumption and investment, as distinguished from governmental consumption and investment.

Table 16.--Per capita income payment and alternative indexes of capacity, by State, 1940

State	Per capita income	Average income per person 14 years of age and over	Average income per adult equivalent 1/	Average income per person in labor force	Average income per employed person
(1)	(2)	(3)	(4)	(5)	(6)
United States.....	$575	$750	$652	$1,437	$1,590
District of Columbia...	1,080	1,635	1,488	2,631	2,834
Delaware..............	896	1,136	1,002	2,092	2,264
New York..............	863	1,084	970	1,984	2,299
Nevada................	836	1,057	933	1,918	2,105
Connecticut...........	827	1,030	919	1,840	2,016
California............	805	994	893	1,901	2,126
New Jersey............	803	935	835	1,690	1,906
Massachusetts.........	766	959	852	1,794	2,020
Illinois..............	726	909	808	1,708	1,878
Rhode Island..........	715	899	797	1,589	1,812
Maryland..............	712	861	754	1,593	1,721
Michigan..............	649	848	737	1,611	1,777
Ohio..................	643	816	720	1,608	1,777
Washington............	632	788	702	1,535	1,704
Pennsylvania..........	628	809	708	1,562	1,825
Wyoming...............	605	801	688	1,504	1,647
Oregon................	579	723	644	1,396	1,547
Montana...............	574	751	651	1,427	1,590
New Hampshire.........	546	698	614	1,300	1,449
Indiana...............	541	697	610	1,396	1,517
Colorado..............	524	689	595	1,397	1,544
Vermont...............	521	684	591	1,322	1,424
Wisconsin.............	516	673	585	1,321	1,443
Maine.................	509	672	579	1,304	1,479
Minnesota.............	509	662	576	1,293	1,436
Missouri..............	505	646	567	1,258	1,375
Iowa..................	485	629	548	1,287	1,376
Utah..................	480	681	564	1,462	1,627
Arizona...............	473	667	555	1,314	1,477
Florida...............	471	618	537	1,144	1,238
Virginia..............	450	573	485	1,093	1,167
Idaho.................	440	603	510	1,213	1,351
Nebraska..............	433	564	490	1,136	1,218
Kansas................	422	543	474	1,130	1,219
Texas.................	413	559	475	1,080	1,176
West Virginia.........	398	563	468	1,197	1,349
South Dakota..........	376	507	432	1,009	1,078
North Dakota..........	368	510	428	1,006	1,084
Louisiana.............	357	495	416	958	1,042
New Mexico............	356	528	426	1,068	1,215
Oklahoma..............	356	487	410	1,030	1,148
Tennessee.............	317	437	368	865	933
North Carolina........	316	454	373	848	897
Georgia...............	315	442	368	804	849
Kentucky..............	308	431	360	881	975
South Carolina........	286	418	340	746	776
Alabama...............	268	385	317	750	803
Arkansas..............	252	355	295	726	780
Mississippi...........	202	292	240	549	577

1/ Based on assumption that 2 children under 14 years of age are equivalent to 1 adult.

Source: Derived from data in Sixteenth Census of the United States, 1940, and Survey of Current Business, August 1945.

Table 17.--Federal grant percentages 1/ based on specified indexes of capacity, 1940 2/

State	Per capita income payments	Average income payment per person 14 years of age and over	Average income payment per adult equivalent 3/	Average income payment per person in labor force	Average income payment per employed person
(1)	(2)	(3)	(4)	(5)	(6)
District of Columbia......	6	---	---	8	11
Delaware.................	22	24	23	27	29
New York.................	25	28	26	31	28
Nevada...................	27	30	28	33	34
Connecticut..............	28	31	30	36	37
California...............	30	34	32	34	33
New Jersey...............	30	38	36	41	40
Massachusetts............	33	36	35	38	36
Illinois.................	37	39	38	41	41
Rhode Island.............	38	40	39	45	43
Maryland.................	38	43	42	45	46
Michigan.................	44	43	43	44	44
Ohio.....................	44	46	45	44	44
Washington...............	45	47	46	47	46
Pennsylvania.............	45	46	36	46	43
Wyoming..................	47	47	47	48	48
Oregon...................	50	52	51	51	51
Montana..................	50	50	50	50	50
New Hampshire............	53	53	53	55	54
Indiana..................	53	54	53	51	52
Colorado.................	54	54	54	51	51
Vermont..................	55	54	55	54	55
Wisconsin................	55	55	55	54	55
Maine....................	56	55	56	55	53
Minnesota................	56	56	56	55	55
Missouri.................	56	57	57	56	57
Iowa.....................	58	58	58	55	57
Utah.....................	58	55	57	50	50
Arizona..................	59	56	57	54	54
Florida..................	59	59	59	60	61
Virginia.................	61	62	63	62	63
Idaho....................	62	60	61	58	58
Nebraska.................	62	62	62	60	62
Kansas...................	63	64	64	61	62
Texas....................	64	63	64	62	63
West Virginia............	65	62	64	58	58
South Dakota.............	67	66	67	65	66
North Dakota.............	68	66	67	65	66
Louisiana................	69	67	68	67	67
New Mexico...............	69	65	67	63	62
Oklahoma.................	69	68	69	64	64
Tennessee................	72	71	72	70	71
North Carolina...........	73	70	71	70	72
Georgia..................	73	71	72	72	73
Kentucky.................	73	71	72	69	69
South Carolina...........	75	72	74	74	76
Alabama..................	77	74	76	74	75
Arkansas.................	78	76	77	75	75
Mississippi..............	82	81	82	81	82

1/ Assuming Federal grant percentage = $100\% - 50\% \frac{\text{State income per unit}}{\text{National income per unit}}$ with no upper or lower limits. Formulas applied to data in table 16.

2/ Note that 1940 experience only is used; the disparities among States are now smaller, so that the range would be reduced if current data were used.

3/ Based on assumption that 2 children under 14 years of age are equivalent to 1 adult.

before measuring State fiscal ability, since ability to pay such taxes is the function being measured. For purposes of intergovernmental fiscal relations, an adjustment for Federal taxes paid, even if it does not materially affect the allocation of Federal aids, would add to the acceptability of the income-payments series for grant-in-aid purposes.

Table 18 illustrates the effect on State income of subtracting various Federal taxes paid,[12] using admittedly rough measures of the incidence of such taxes. The adjustments seem large enough for the year in question to warrant further study; such study will need to give special attention to the problem of estimating taxes by state of incidence--a troublesome question.

Supernumerary Income

The "income deficit" measure of need for public assistance was discussed in chapter VIII. The corollary to the income-deficit measure of need is the "supernumerary income" [13] measure of fiscal ability. Both require data on the distribution of income by income class for each State for their implementation. The former depends on the number of persons (or consumer units) with income under the minimum necessary for subsistence, and the amount of their income; the latter reflects the number of persons with incomes over that minimum, however defined, and the amount of the excess. The logic supporting use of supernumerary income is worth further attention here.

According to the ability-to-pay principle, State and local governments should not attempt to tax every dollar of income as equal to every other dollar. Rather, governments should recognize that every human being needs a certain minimum for subsistence--food, shelter, and clothing--before he can afford to pay for governmental services. In recognition

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[12] Unpublished analysis prepared by Basil Rodes, Bureau of Research and Statistics, Social Security Administration. This problem is discussed further by Paul H. Wueller in his works herein cited.

[13] Supernumerary income was originally defined as the difference between disposable income and living costs by C. F. Roos and Victor von Szeliski in "Factors Governing Changes in Domestic Automobile Demand" (The Dynamics of Automobile Demand, General Motors Corp., New York, 1939, pp. 39-42). The concept was broadened by Marvin A. Bacon in his Income as an Index of the Fiscal Capacity of Michigan Counties (Michigan Governmental Studies, No. 8, University of Michigan, 1941). Bacon defines it as "the amount of income available. . .over and above the amounts needed for the purchase of the necessities of life" (page 13), and he considers it more adequate and suitable as an index than income payments or assessed valuation (p. 32). A concept of "income surplus," the amount in excess of "minimum subsistence" living costs, had previously been elaborated by Julius Wendzel, in unpublished memoranda for the Bureau of Research and Statistics of the Social Security Board.

Table 18.--State per capita income payments, before and after adjustment for Federal taxes, 1945

State 1/	Per capita income payments, 1945	Per capita income payments adjusted for--			
		Personal Federal income taxes, 1945	Total Federal taxes by State of incidence, excluding corporation taxes, 1945	Total Federal taxes adjusted by State of incidence, 1945	
				Method A 2/	Method B 3/
United States average....	$1,137	$1,016	$944	$850	$850
Mississippi....................	548	530	503	472	491
Arkansas....................	651	621	587	548	572
South Carolina....................	654	622	582	543	562
Alabama....................	695	655	615	573	593
North Carolina....................	726	681	641	592	600
Kentucky....................	733	717	643	590	592
Georgia....................	739	681	639	590	594
Louisiana....................	780	717	670	610	632
New Mexico....................	796	744	695	645	660
Tennessee....................	809	755	710	659	675
West Virginia....................	839	787	740	687	690
Oklahoma....................	890	824	772	705	740
Virginia....................	904	798	750	693	696
Arizona....................	915	838	779	709	738
Texas....................	916	833	775	697	737
New Hampshire....................	970	887	820	732	695
Florida....................	1,005	895	819	720	727
Vermont....................	1,025	954	889	806	794
Utah....................	1,030	959	906	846	860
Maine....................	1,053	971	906	814	813
Idaho....................	1,058	940	876	812	844
Minnesota....................	1,062	953	874	790	807
Missouri....................	1,067	948	884	800	797
South Dakota....................	1,091	1,019	954	893	932
Colorado....................	1,110	988	919	829	814
Iowa....................	1,110	1,031	965	892	918
Nebraska....................	1,120	1,006	935	853	893
Wyoming....................	1,121	1,021	960	896	890
Kansas....................	1,123	1,020	961	888	923
North Dakota....................	1,123	1,062	985	914	968
Indiana....................	1,154	1,063	1,000	926	947
Wisconsin....................	1,162	1,061	976	881	899
Montana....................	1,172	1,088	1,007	931	953
Pennsylvania....................	1,201	1,058	979	875	856
Michigan....................	1,213	1,054	975	887	887
Maryland....................	1,233	1,064	993	887	881
Oregon....................	1,272	1,136	1,056	971	1,004
Rhode Island....................	1,286	1,099	1,009	882	851
Ohio....................	1,290	1,147	1,064	963	955
Nevada....................	1,298	1,045	951	816	820
Massachusetts....................	1,330	1,153	1,070	945	900
District of Columbia..........	1,332	1,173	1,106	1,001	984
Illinois....................	1,370	1,172	1,090	987	976
New Jersey....................	1,384	1,227	1,145	1,034	1,029
Delaware....................	1,393	983	872	694	630
Washington....................	1,447	1,267	1,179	1,082	1,120
Connecticut....................	1,453	1,264	1,168	1,023	883
California....................	1,526	1,271	1,181	1,051	814
New York....................	1,601	1,311	1,200	1,036	1,001

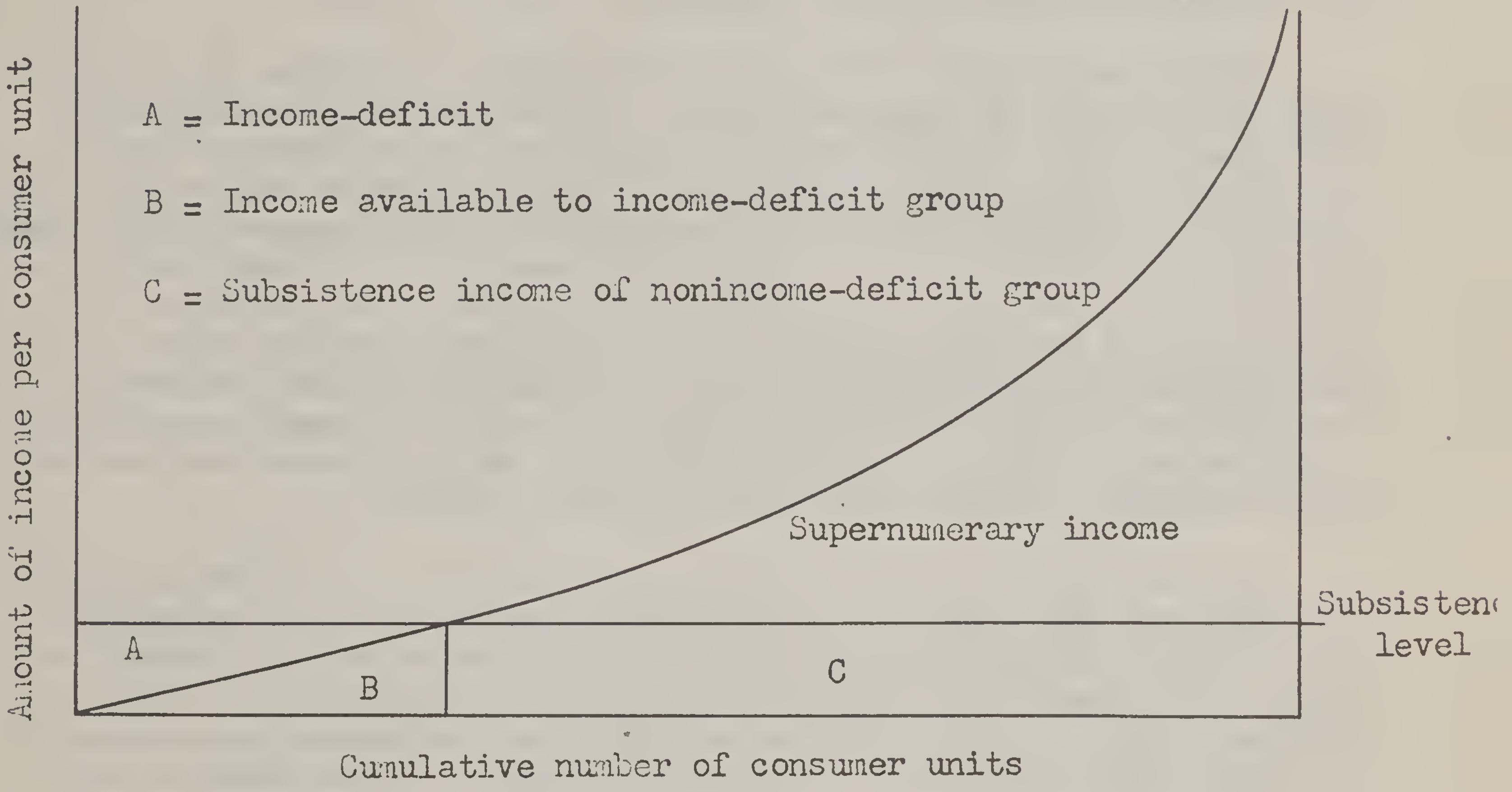
1/ Ranked in reverse order of 1945 per capita income payments.

2/ Excise and corporation taxes adjusted for their incidence on the basis of their 1940 incidence as reported in "Federal, State and Local Government Fiscal Relations"(report of the Treasury Committee on Intergovernmental Fiscal Relations) and further adjusted to reflect State income payment changes between 1940 and 1945.

3/ Excise taxes (including miscellaneous taxes) adjusted for their incidence as above (see footnote 2) and corporate taxes adjusted for their incidence on the basis of stock dividends in 1946 (based on dividend payments reported in 1942).

Source: Basic data used--Incomes, "State Income Payments in 1945," Survey of Current Business, August 1946, U.S. Department of Commerce.
Federal taxes, Special Release on Federal Tax Collections, Fiscal Year 1946, Bureau of Internal Revenue.
Population, U.S. Bureau of the Census, estimates as of July 1, 1945.

of the logic of this argument, income taxes permit a personal exemption for the taxpayer and each person dependent on him for support. Therefore, the argument continues, fiscal ability should be measured not by total income payments but by the income payments remaining after excluding all persons whose incomes are less than the subsistence amount, and after excluding a subsistence amount for each other person. Graphically, the picture might be drawn this way:


A = Income-deficit
B = Income available to income-deficit group
C = Subsistence income of nonincome-deficit group
Supernumerary income
Subsisten
level
A
B
C
Amount of income per consumer unit
Cumulative number of consumer units

The subsistence line is, of course, the critical point if this theory is to be accepted, assuming the existence of factual knowledge as to the shape of the line in each State. In the graph above, the lines are arbitrary and illustrative, and the subsistence line may be higher than most policymakers would care to accept.

In an attempt to test whether or not State and local governments do in fact obtain revenues that are proportional to supernumerary rather than total income, the author made an extensive study of the limited data on State and local governmental revenues as compared with income payments.14/ The results were inconclusive. For years of reasonable prosperity, the tests seemed to show revenues as a proportionate

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14/ Except for the 1941 estimates, comprehensive State and local financial data are available only for decennial years, such as 1932 and 1942. Because State data are available annually, for other years a sample of State data was used that would be representative of State-local totals.

part of income after subtracting a subsistence minimum. But during depression years, and especially for the year 1932 for which complete State and local governmental data are available, the results were the reverse. If anything, State and local revenues (and expenditures) tended to be disproportionate to total (as against supernumerary) income, and actually to be substantially regressive as against total income. Governmental services were maintained, apparently, in spite of the sharp decline in supernumerary income.

Additional research into the distribution of income within individual States will be necessary before the problem can be quantified. Attention also will need to be given to the method of determining the subsistence level. Adjustments will have to be made to take account of changes in the price level and also, perhaps, of differences in the cost of living among States. As a rough approximation to illustrate the order of magnitude, a very restricted subsistence level might be used, say equal to 30 percent of the annual national per capita income. This adjustment would reflect not so much a judgment as to the present cost of subsistence (which will always be a subjective judgment) as simply an automatically adjustable computation that will considerably sharpen "supernumerary" disparities in State fiscal ability.

If, for example, per capita incomes range among States from $550 to $1,450, and $450 were to be subtracted from each as the subsistence level, it is apparent that the relative differences would change from approximately 1-3 before adjustment to 1-10 after adjustment. Thus the practical effect of fixing higher subsistence levels would be to so widen the range among States as to make the adjustment unacceptable to many persons.

Further study of income distribution within States would be useful if only to develop the "income deficit" concept as an administrative tool for appraisal of need for public assistance. It is probable that, if the income-deficit approach to measuring welfare need were used instead of total population, it would favor the low-income States. Use of supernumerary income in place of income payments would have the same effect. These matters must be kept in mind when considering adjustments for Federal taxes paid or for differences in the cost of living--adjustments that would tend to favor the high-income States. It may be that, when all adjustments are taken together, they will largely offset each other. But this can only be proved or tested when more precise series are available. Further inquiry in all four directions should be made.

General Versus Special Measures of Fiscal Ability

Each separate governmental program is, in a sense, a rival claimant for funds from State and local budgets. In some States one type of program will have reason to take a larger share of the budget than will the same program in another State, where there may be less need for the program. For example, venereal disease control obviously has a greater claim in a State with a high incidence of venereal disease.

From this sound premise, the idea has sometimes been developed that each separate grant-in-aid program should have its own measure of State fiscal ability—a measure that will somehow assess the relative importance of that program in each State. In one proposal, for example, income payments in each State would be multiplied by a factor representing the proportion of population that might be served by that program in that State.

Such special measures are open to three major objections. In the first place, they presuppose the possibility of assessing objectively the relative claims that each program has against each State's budget—and many is the State budget officer who is still looking for these various yardsticks.

Secondly, the measures assume that fiscal ability is a series of segments, applicable individually to separate services and differing within the same State from one service to the next. However, the object of a measure of fiscal ability is to measure total State capacity to support public services, including the capacity to support one or another particular service.

Finally, the use of special measures raises substantial questions about Federal-State relationships. For each individual program, unless fixed by Congress, it would seem to suggest that Federal agencies have a more intimate knowledge of the State's budgetary problems than the State officials have. From the standpoint of State agencies and legislatures having to deal with many or all Federal grant-in-aid programs, and from the standpoint of public relations, if a different measure of fiscal ability were used in each separate grant allocation, confusion would be confounded and compounded.

For reasons of simplicity, objectivity, and general acceptability, it would be far better to use a general measure of fiscal ability in all grant programs. One can admit the merit to the argument that different programs do have different claims in different States and still feel that these differences should not be allowed to alter the measure of general fiscal ability, but rather should be adequately reflected in the measurement of need.

CHAPTER X

PUBLIC ASSISTANCE EQUALIZATION FORMULAS

Grants-in-aid for public assistance will probably remain an integral part of a program of economic security, if only for the reason that social insurance and other related programs will not build a sufficiently fine net to catch all who may lack economic security. In February 1947, about 2.5 million of the nearly 60 million in the labor force were unemployed. About 900,000 of the 2.5 million drew unemployment insurance benefits. During the same period, about 1.7 million benefits were currently being paid under old-age and survivors insurance, and unreached by the insurance programs were an additional 2.2 million recipients of old-age assistance, 930,000 children in 360,000 families drawing aid to dependent children, 77,000 recipients of aid to the blind, and 344,000 cases on general assistance.1/ Substantially more than 3 million persons were dependent on public assistance, notwithstanding relatively full employment.

In 1934, before the passage of the Social Security Act, only 24 States had provisions for aid to the blind, only 30 for old-age "pensions," and 45 States had some form of "mothers' pension" law. The enactment of Federal-aid provisions has resulted in complete acceptance of these programs by the States and territories (table 1). The welfare of needy persons who are not eligible under one of the three aided categories was to be safeguarded, in the opinion of the Committee on Economic Security, by improved administration and informed public opinion. Differentials in general assistance expenditures and recipient rates among States suggest that these safeguards have proved inadequate, and that nothing short of Federal aid for expenditures to meet their needs will assure that States will provide assistance to such needy persons on a basis comparable with that of the three present categories. Such Federal aid, if adopted, might become a "fourth category," or else all Federal aid for public assistance might be combined in a "unified" program; the latter might insure greater comparability of treatment among all programs.

The terms and conditions attached to such a grant program might be modified from the present ones if the program is based on the view that public assistance is a component of a social security program that is intent primarily on maintenance of income. A stable society cannot tolerate great economic insecurity, and a prosperous society requires maintenance of at least a minimum income for all its members. An expanded social insurance program, paying benefits to unemployed, disabled, or retired persons, and to dependents and survivors of insured workers, will take over much of the burden that now falls on public assistance rolls. All the more reason, then, for making public assistance supplement the social insurance program more

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1/ Data from Social Security Bulletin, April 1947.

adequately, to provide income maintenance for those outside the program, and to meet any special need that would otherwise be unmet, even that of insured individuals.

An Equalization Matching Formula

The measures of need and the generalized measure of ability can be combined in the basic equalization formula, in any of a variety of ways, so as to yield equalization allocations and equalization matching.

Because of difficulty in measuring the need for Federal funds from State to State and from year to year, and because of apparent intent to give each State full control over the extent and liberality of its assistance programs, no limit is placed in the Social Security Act on total Federal grants, or on the amount that may go to any one State, and hence no allotment formula is needed. The "matching" or reimbursement provisions 2/ automatically allot to each State whatever sum is needed. If the initial Federal appropriation proves insufficient, a deficiency appropriation has always been granted as requested.

To make equalization possible within the framework of an open-end matching program like public assistance, it is necessary to provide variable matching percentages. Because each State is free to be liberal or frugal in its support of public assistance, there can be no assurance that equalization matching or reimbursement percentages will in fact achieve equalization, although they are the provisions most essential to it.

An equalization formula can be devised from the basic formula of chapter VII.3/ Assuming that population is in fact an acceptable

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2/ These provisions are outlined in chapter IV and in appendix B.

3/ In chapter VII it was shown that, in a full equalization formula using variable matching percentages, the Federal percentage (P_F) and the non-Federal percentage (P_{NF}) bore the following relationship to need and ability:

$$P_F = \frac{R\ P_n - P_{ab}}{R\ P_n} = 1 - \frac{P_{ab}}{R\ P_n}; \text{ and}$$

$$P_{NF} = \frac{P_{ab}}{R\ P_n}$$

If total fiscal ability (Ab) is represented by total income payments, then when each State's fiscal ability (P_{ab}), expressed as a percent of a total, is multiplied by the total (Ab), it becomes simply income payments within the State. Similarly, using population as a measure of need, the population of the Nation would equal N. Multiplying P_n, the percent of need in each (Continued) measure of need, that income payments are an acceptable measure of ability, and that the Federal Government wishes to support half the cost of public assistance in the "average State" (having a per capita income equal to the national average), the formula is: the State percentage for a State bears the same ratio to 50 percent as the State per capita income bears to the national per capita income; or

$$\frac{\text{State percentage}}{\text{50 percent}} = \frac{\text{State per capita income}}{\text{National per capita income}}$$

3/ (Continued from page 129)State, by N, the total, would simply yield the population of each State. In the equation used above for the non-Federal percentage, one could multiply both sides by Ab/N. The formula would then appear:

$P_{NF} \cdot \frac{Ab}{N} = \frac{P_{ab} \cdot Ab}{R\ (P_n \cdot N)}$; but $P_{ab} \cdot AB$ is income payments in the State and $P_n \cdot N$ is State population; furthermore, income payments in the State divided by population equals State per capita income. Also, Ab/N is income payments in the Nation divided by total population, and represents the national per capita income. Therefore:

$$P_{NF} \cdot \text{National per capita income} = \frac{\text{State per capita income}}{R}$$

Dividing both sides by national per capita income, the formula becomes:

$$P_{NF} = \frac{\text{State per capita income}}{R \cdot \text{National per capita income}}$$

The only remaining value to be fixed is the support level (R). If, on the average, the Federal Government wishes to provide an amount equal to the non-Federal amount, so that the total is twice as great as the non-Federal expenditure, then R equals 2. Expressed another way, the non-Federal (or State-local) percentage for each State equals the percentage which that State's per capita income is of twice the national average per capita income.

Moving R to the other side of the equation (mathematically, this can be accomplished by multiplying both sides by 1/.50), the equation becomes:

$$\frac{\text{State percentage}}{\text{50 percent}} = \frac{\text{State per capita income}}{\text{National per capita income}}$$

In this form, the "average State" percentage can be seen to be equal to 50 percent. If the Federal Government wishes to support two-thirds of the total (or to make the Federal-State total about three times the non-Federal expenditure), the "average State" percentage would be 33 1/3 instead of 50, and R would be 3. Thus the formula has an adjustable "pivot-point" about which the relative Federal and State shares can be arrayed in equalization fashion, leaving to legislation or by regulation under statutory guides the determination of the average relationship between Federal and State funds.

The formula appears slightly more complex when the Federal share (P_F) is computed directly. Therefore, in illustrative computations the non-Federal percentage has usually been applied, with the obvious corollary that the Federal percentage is simply the difference between the non-Federal percentage and 100 percent.[4]

The formula's logic does not call for any upper or lower limits for the percentages derived. However, if other circumstances dictate, limits can be imposed on the upper and lower ends of the distribution. The closer the limits are to the pivot-point, the more States will be cut off from the full effects of the formula.

Public assistance grants have been made for about 12 years, and all States have been accustomed to receiving 50 percent of their expenditures within the federally-aided limits (and during the period covered by the pertinent 1946 amendments to the Social Security Act, described in chapter IV, they will be getting more than 50 percent). As a result, proposals for variable grants for public assistance usually suggest a minimum Federal percentage of 50; to put it another way, variable grants would apply only to those States in which per capita income is below the national average.

This basic equalization formula, using a 50 percent "pivot-point," appears in various bills of the Seventy-ninth and Eightieth

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[4] The comparable formula for the Federal percentage would read:

$$P_F = 100\% - \frac{\text{State per capita income}}{\text{R - National per capita income}}\text{, or}$$

$$= \frac{\text{R} \cdot \text{National per capita income} - \text{State per capita income}}{\text{R} \cdot \text{National per capita income}}$$

One can substitute whatever value of R is called for; if, for example, the Federal share of the total equals the State share, then R would equal 2. Table 19 illustrates the State and Federal percentages that would result from the use of this formula, using several different "pivot-points."

Table 19.--Percentages derived from basic equalization formula assuming alternative "pivot-points"

States ranked by 1943-45 per capita income	Federal-aid percentages if the average (Federal pivot-point) is:				State percentage shares, if the average (State pivot-point) is:						
	25	33 1/3	50	60	75	66 2/3	50	40	30	20	10
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
High-income group:											
New York............:	---	10	33	46	(101)	90	67	54	40	27	13
Connecticut..........	---	11	33	47	100	89	67	53	40	27	13
California...........	---	11	34	47	100	89	66	53	40	27	13
Washington...........	2	13	35	48	98	87	65	52	39	26	13
Delaware.............	7	18	38	51	93	82	62	49	37	25	12
New Jersey...........	8	18	39	51	92	82	61	49	37	25	12
District of Columbia.	11	21	41	53	89	79	59	47	36	24	12
Nevada...............	12	22	41	53	88	78	59	47	35	24	12
Illinois.............	12	22	41	53	88	78	59	47	35	23	12
Oregon...............	14	23	42	54	86	77	58	46	35	23	12
Massachusetts........	14	24	43	54	86	76	57	46	34	23	11
Ohio.................	14	24	43	54	86	76	57	46	34	23	11
Michigan.............	15	24	43	55	85	76	57	45	34	23	11
Rhode Island.........	15	24	43	55	85	76	57	45	34	23	11
Maryland.............	17	26	45	56	83	74	55	44	33	22	11
Pennsylvania.........	22	31	48	59	78	69	52	41	31	21	10
Indiana..............	23	32	49	59	77	68	51	41	31	20	10
Montana..............	23	32	49	59	77	68	51	41	31	20	10
Middle-income group:											
Wisconsin............	26	34	51	61	74	66	49	39	30	20	10
Kansas...............	27	35	51	61	73	65	49	39	29	19	10
Maine................	29	37	52	62	71	63	48	38	29	19	10
Nebraska.............	29	37	53	62	71	63	47	38	28	19	9
North Dakota.........	29	37	53	62	71	63	47	38	28	19	9
Iowa.................	29	37	53	62	71	63	47	38	28	19	9
Utah.................	30	38	54	63	70	62	46	37	28	19	9
Wyoming..............	30	38	54	63	70	62	46	37	28	19	9
Colorado.............	31	38	54	63	69	62	46	37	28	19	9
Idaho................	32	39	55	64	68	61	45	36	27	18	9
Missouri.............	33	40	55	64	67	60	45	36	27	18	9
Minnesota............	34	41	56	65	66	59	44	35	27	18	9
South Dakota.........	35	42	56	65	65	58	44	35	26	17	9
Low-income group:											
Vermont..............	35	42	57	65	65	58	43	35	26	17	9
Florida..............	36	43	57	66	64	57	43	34	26	17	9
Texas................	39	46	60	68	61	54	40	32	24	16	8
Arizona..............	40	46	60	68	60	54	40	32	24	16	8
New Hampshire........	40	46	60	68	60	54	40	32	24	16	8
Virginia.............	41	47	61	68	59	53	39	32	24	16	8
Oklahoma.............	44	50	63	70	56	50	37	30	22	15	7
West Virginia........	47	53	65	72	53	47	35	28	21	14	7
Louisiana............	48	54	65	72	52	46	35	28	21	14	7
New Mexico...........	49	55	66	73	51	45	34	27	20	14	7
Tennessee............	49	55	66	73	51	45	34	27	20	13	7
Georgia..............	52	57	68	74	48	43	32	26	19	13	6
Kentucky.............	54	59	69	75	46	41	31	25	18	12	6
North Carolina.......	54	59	69	75	46	41	31	25	18	12	6
Alabama..............	55	60	70	76	45	40	30	24	18	12	6
South Carolina.......	57	62	72	77	43	38	28	23	17	11	6
Arkansas.............	60	64	73	78	40	36	27	22	16	11	5
Mississippi..........	64	68	76	81	36	32	24	19	14	10	5

Congresses relating to public assistance grants.5/ Most such bills included a 50 percent minimum and a 75 percent maximum Federal percentage. The House Ways and Means Committee approved a similar formula, with a 66 2/3 percent maximum Federal percentage, in H.R. 6911.6/ The Senate accepted the same formula in agreeing to the report of its Finance Committee 7/ in making amendments to H.R. 7037 (the second version of the Social Security Act Amendments of 1946). In both cases the formula assured all States with per capita incomes equal to or greater than the national average a Federal percentage of 50; other States with per capita incomes not less than two-thirds of the national average would have had Federal percentages ranging from 50 percent to 66 2/3 percent; and all States with per capita incomes less than two-thirds of the national average would have had 66 2/3 percent Federal aid, within the stated limits per recipient per month.

The logic of imposing a lower limit of 50 percent on the Federal reimbursement percentage presumably is that it is difficult for a grant-making unit to recede from an established level of financial aid. The logic of imposing an upper limit is not so clear. Under a formula that adjusts the Federal-State shares to changing patterns of fiscal ability, as this formula does, an upper limit is a decision not to treat all low-income States in full accord with the logic of the formula.

Some persons may have feared that the costs would grow too high unless a limit were imposed. Actually, congressional committee action reducing the 75 percent maximum originally included in the bills to a 66 2/3 percentage limit would have saved only about one-tenth of the added cost of the amendments proposed to the public assistance titles. Because only one State is affected by it, a limit of 75 percent, given the present distribution of income payments, would save less than 1 percent on the national total cost, compared with no limit at all.

It is possible, if there were greater disparities in per capita income payments among States, that the maximum percentage limits would effect somewhat larger savings (or occasion a smaller increase in the Federal cost), but they would do so at the expense of assistance recipients of the few States affected by the limits.

Another argument advanced is that without a limit, the Federal

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5/ E.g., of the 79th Congress; H.R. Nos. 3293, 4730, 5116, 5686, 6911, and S. Nos. 1050, 1606, 1653. Of the 80th Congress through March 31, 1947: S. 648, and H.R. 2311.

6/ House Report No. 2447, July 1, 1946, reporting Social Security Act Amendments of 1946.

7/ Senate Report No. 1862, July 27, 1946.

share might conceivably go up to 90 percent in a few States so that the Federal Government would be putting up $9 for each State dollar. If this takes place, it is feared that there may be no remaining incentive for the States to expend these funds wisely. Two observations are in order. First, if the income experience since 1929 is used, the Federal share in no State would have been greater (on a 3-year average basis) than 83 percent, and then only for one State for 2 years in the depth of the depression. At the outside, then, this formula yields a Federal-State ratio of less than 5 to 1.

Second, even if some State (or more likely, a territory or possession) were to have a very heavy proportion of Federal aid in comparison with the non-Federal share, the non-Federal share would still represent tax effort equal to that for other low-income States, if it is to have a substantially similar program. A poor State is not likely to waste its meager resources. A limit would penalize its recipients, for the sake of a small saving in Federal grants. However, assuming that adoption of an equalization formula might make possible a very considerable expansion of the aided program in some States, or a greater expansion than could efficiently be administered in a short period of time, it is argued that an upper limit might well be placed upon the maximum Federal percentages. This is largely a problem of timing, and a progressive set of limits might be provided--such as 75% the first year, 80% the next, 85% the third year, then 90%, and then no limit whatever.

The basic formula has been called a "full equalization" formula. If there were no upper or lower limits on the Federal percentages, and if State-local expenditures were fully matchable, the formula could equalize the financial burden on States of providing for equal need. However, as the following analysis shows, this equalization is only established if States have equal need (in proportion to population). Since need is probably relatively greater in the poorer States, the formula will not make possible equal treatment for all recipients in similar circumstances unless such States make considerably greater effort than others.

Proof of "Full Equalization," Assuming Equal Effort

Table 20 shows that, when the necessary uniform assumptions are introduced, uniform results will flow from use of the "full equalization" formula. Standardizing assumptions are successively introduced, so that the importance of each can be seen separately. For simplicity's sake, only old-age assistance is dealt with, and it is arbitrarily assumed that the average margin between recipients' "requirements" and "resources" is the same in all States, so that equal average monthly payments would reflect equal treatment of applicants in each State.

The States are ranked according to per capita income, high to low, and the average payment in June 1945 per recipient of old-age assistance appears in column 2. Some noncomparability results from the fact that some State-local expenditures are nonmatchable. Estimates of these amounts appear in column 3 in dollars per case, and the amount the average payment would have been if all State-local expenditures had been matchable in June 1945 is shown in column 6. Further differences result from differences in effort as shown in column 4.

Table 20.--Illustration of equalization possible in average monthly old-age assistance payments through use of "full equalization" formula, under certain standard assumptions

States ranked by 1943-45 per capita income	Average OAA payment June 1945 1/	Estimated State expenditures not Federally matched in dollars per recipient 2/	Total monthly State OAA expenditures as percent of State income payments, 1945 3/	OAA case load as percent of total population 4/	Hypothetical average OAA payment, assuming, successively, that:			Percentage shares under "full equalization," 50 percent pivot point 7/		Effect on average grants of changing to equalization percentages, in ratio terms	Hypothetical average OAA payment after adopting "full equalization" percentages
					All State expenditures were fully matched	State effort equaled 0.03 percent of income payments 5/	OAA case load equaled 2 percent of population 6/	Federal	State		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
National average.......	$29.46	$1.65	0.0207	1.5334	$31.11	$45.09	$34.57	50.00	50.00	1.0000	$34.57
New York....................	34.79	3.27	.0097	.8195	38.06	117.71	48.23	30.65	69.35	.7210	34.77
Connecticut.................	36.73	3.01	.0106	.7710	39.74	112.47	43.36	37.00	63.00	.7937	34.41
California..................	47.32	8.42	.0335	1.7801	55.74	49.92	44.43	35.65	64.35	.7770	34.52
Washington..................	48.29	9.27	.0590	2.8830	57.56	29.27	42.19	38.83	61.17	.8174	34.49
Delaware....................	15.84	---	.0026	.4504	15.84	182.77	41.16	39.96	60.04	.8328	34.28
New Jersey..................	31.74	1.27	.0067	.5568	33.01	147.81	41.15	40.30	59.70	.8375	34.46
District of Columbia.........	31.89	1.40	.0032	.2603	33.29	312.09	40.62	40.83	59.17	.8450	34.32
Nevada......................	38.42	---	.0188	1.2145	38.42	61.31	37.23	45.96	54.04	.9252	34.45
Illinois....................	31.93	.57	.0187	1.5607	32.50	52.14	40.69	40.87	59.13	.8456	34.41
Oregon......................	35.37	1.27	.0237	1.6373	36.64	46.38	37.97	44.96	55.04	.9084	34.49
Massachusetts...............	42.76	7.01	.0332	1.7618	49.77	44.97	39.61	42.57	57.43	.8706	34.48
Ohio........................	29.85	---	.0198	1.7082	29.85	45.23	38.63	43.96	56.04	.8922	34.47
Michigan....................	30.65	.06	.0194	1.5326	30.71	47.49	36.39	47.30	52.70	.9488	34.53
Rhode Island................	33.67	2.22	.0137	.9644	35.89	78.59	37.90	44.87	55.13	.9069	34.37
Maryland....................	27.77	---	.0061	.5325	27.77	136.57	36.36	47.30	52.70	.9488	34.50
Pennsylvania................	30.00	.30	.0113	.8905	30.30	80.44	35.82	47.87	52.13	.9591	34.35
Indiana.....................	25.61	.05	.0178	1.5954	25.66	43.25	34.50	49.91	50.09	.9982	34.44
Montana.....................	31.10	---	.0309	2.3332	31.10	30.19	35.22	49.04	50.96	.9812	34.56
Wisconsin...................	29.14	---	.0190	1.5111	29.14	46.01	34.76	49.52	50.48	.9905	34.43
Kansas......................	28.82	1.15	.0217	1.6133	29.97	41.43	33.42	51.61	48.39	1.0333	34.53
Maine.......................	29.59	---	.0265	1.8877	29.59	33.50	31.62	54.40	45.60	1.0965	34.67
Nebraska....................	28.74	---	.0257	1.9991	28.74	33.55	33.53	51.43	48.57	1.0294	34.52
North Dakota................	33.32	2.73	.0267	1.6645	36.05	40.51	33.71	51.17	48.83	1.0240	34.52
Iowa........................	31.72	1.02	.0321	2.1718	32.74	30.60	33.23	51.78	48.22	1.0369	34.46
Utah........................	38.73	1.86	.0408	2.0561	40.59	29.85	30.69	55.52	44.48	1.1241	34.50
Wyoming.....................	36.30	1.38	.0231	1.3403	37.68	48.94	32.80	52.35	47.65	1.0493	34.42
Colorado....................	41.35	4.88	.0755	3.5921	46.23	18.37	32.99	52.17	47.83	1.0454	34.49
Idaho.......................	30.22	.66	.0290	1.9831	30.88	31.94	31.67	54.17	45.83	1.0910	34.55
Missouri....................	23.36	---	.0308	2.8046	23.36	22.75	31.90	53.78	46.22	1.0818	34.51
Minnesota...................	30.12	.36	.0313	2.1814	30.48	29.21	31.86	53.87	46.13	1.0839	34.53
South Dakota................	24.53	---	.0260	2.2951	24.53	28.30	32.48	52.91	47.09	1.0618	34.49
Vermont.....................	22.30	---	.0179	1.6479	22.30	37.37	30.79	55.52	44.48	1.1241	34.61
Florida.....................	28.88	---	.0246	1.7035	28.88	35.22	30.00	56.70	43.30	1.1547	34.64
Texas.......................	23.90	---	.0324	2,4852	23.90	22.13	27.50	60.13	39.87	1.2541	34.49
Arizona.....................	38.55	.08	.0314	1.4899	38.63	36.91	27.50	60.09	39.91	1.2528	34.45
New Hampshire...............	30.03	.06	.0221	1.4259	30.09	40.85	29.12	57.78	42.22	1.1843	34.49
Virginia....................	13.70	---	.0037	.4885	13.70	111.08	27.13	60.74	39.26	1.2736	34.55
Oklahoma....................	29.27	---	.0629	3.8238	29.27	13.96	26.69	61.35	38.65	1.2937	34.53
West Virginia...............	17.98	---	.0115	1.0682	17.98	46.90	25.05	63.52	36.48	1.3706	34.33
Louisiana...................	23.65	.19	.0225	1.4815	23.84	31.79	23.55	65.87	34.13	1.4650	34.50
New Mexico..................	31.81	1.72	.0227	1.1003	33.53	44.31	24.38	64.70	35.30	1.4164	34.53
Tennessee...................	16.08	---	.0129	1.3092	16.08	37.40	24.48	64.65	35.35	1.4144	34.62
Georgia.....................	11.42	---	.0160	2.0873	11.42	21.41	22.34	67.61	32.39	1.5437	34.49
Kentucky....................	11.46	---	.0144	1.8499	11.46	23.87	22.08	68.04	31.96	1.5645	34.54
North Carolina..............	12.50	---	.0079	.9312	12.50	47.47	22.10	68.17	31.83	1.5708	34.71
Alabama.....................	15.51	.03	.0126	1.1294	15.54	37.00	20.89	69.57	30.43	1.6431	34.32
South Carolina..............	14.14	---	.0120	1.1218	14.14	35.35	19.83	71.17	28.83	1.7343	34.39
Arkansas....................	17.99	.04	.0215	1.5588	18.03	25.16	19.61	71.57	28.43	1.7587	34.49
Mississippi.................	15.42	---	.0183	1.3207	15.42	25.28	16.69	75.83	24.17	2.0687	34.53

1/ Social Security Board Bulletin, August 1945, p. 42.
2/ Derived by applying percent unmatched during 1945 (from Bureau of Public Assistance "Source of Funds" Release) to the June 1945 average payments.
3/ Assuming that the State (including local) percentage of the total for 1945 applies to June 1945 expenditures.
4/ Number of recipients (cases) divided by the average 1945 population used in obtaining per capita income.
5/ Differences between this and previous column reflect importance of present vs. uniform fiscal effort. Differences within the column reflect differences in case load and in fiscal ability.
6/ Differences in average payments due solely to differences in fiscal ability.
7/ State percentage is to 50 percent as State per capita income (1945 only) is to U.S. per capita income (1945). Use of one year's income rather than 3 year average permits internal consistency of table and avoids differences due to such averaging.

The actual monthly effort expended by the State and local governments in June 1945 as a percent of 1945 income payments, varied from .0026 percent to .0755 percent (column 4). The effect on average payments of assuming that each State were to devote 0.03 percent of its income payments (monthly) to old-age assistance (and 12 States spent more than that percentage in June 1945) is shown in column 7.

Present case loads represent widely different percentages of population, as can be seen in column 5. The additional effect on the average payments of assuming that each State's case load was 2 percent of the population (and in 11 States more than 2 percent of the population received assistance in June 1945) is shown in column 8. The Federal and State percentage shares under "full equalization" are shown in columns 9 and 10. The effect of changing from 50-50 matching to equalization matching is shown in column 11, as the ratio of the new to the old. The final column, 12, demonstrates the substantial equalization that follows from applying equalization matching percentages to the average payment in column 8. After all the standardizing assumptions have been adopted, the payments are shown to be equalized within the range of $34.32 to $34.77. These minor deviations about the mean ($34.57) are caused by rounding. In actual practice these standardizing assumptions would never be fully realized, nor need they be. As a result, however, the "full equalization" formula would still fall considerably short of making possible equal average monthly payments to existing case loads, State by State, with uniform effort.

Other Public Assistance Formula Proposals

Before the "full equalization" formula was developed, a number of alternatives had been considered and tested and a few had found some support at one time or another.

The linear interpolation formula.--It has been proposed (e.g., S. 1188, 79th Congress) that the Federal percentage shares be determined on the basis of the ratio of the relative fiscal ability of each State to that of the two extreme States. The two extreme States would have been assigned the maximum and minimum Federal percentages, and the Federal percentages for the other States would vary within these assigned limits, in proportion to their position between the highest and lowest.

This formula might be stated as follows:

> The Federal-aid percentage for any State should bear the same ratio to the minimum and maximum Federal-aid percentages as that State's per capita income bears to the highest and lowest per capita incomes.

The formula for determining the percentages for a given State under this method is: the Federal-aid percentage equals the minimum Federal-aid percentage plus the product of (the maximum minus the minimum) times the quotient of (the highest State per capita income minus the given State's per capita income) divided by (the highest State per capita income minus lowest State per capita income). Or:

$$P_F = \text{Minimum \%} + \left(\begin{array}{l}\text{Maximum \% minus}\\ \text{minimum \%}\end{array}\right) \times \left(\frac{\begin{array}{c}\text{Highest State per}\\ \text{capita income}\end{array} - \begin{array}{c}\text{The Given State's}\\ \text{per capita income}\end{array}}{\begin{array}{c}\text{Highest State per}\\ \text{capita income}\end{array} - \begin{array}{c}\text{Lowest State per}\\ \text{capita income}\end{array}}\right)$$

The graph obtained by plotting the State per capita incomes and the corresponding Federal percentages derived from them with this formula is a straight line. Because the percentages are determined by an interpolation method and since the graph is a straight line, the method is referred to as the "linear interpolation method."

The principle of the linear relationship is that, for a constant difference in the independent variable, there is a corresponding constant difference in the dependent variable. Accordingly, in this linear formula, a constant difference in the fiscal-ability variable (State per capita income) results in a corresponding constant difference in the Federal matching percentage.

The major weaknesses of any linear formula operating within predetermined limits are that: (1) the degree of equalization becomes largely a function of the dispersion of income payments, rather than a one-time legislative determination, so that the extent of equalization will vary from year to year; and (2) it unduly subjects all States to dependence on vagaries in the per capita income figures of the richest or poorest States. Averaging over a period of 3 years will lessen this influence but not eliminate it completely. Averaging of several of the richest and several of the poorest States would be an even more effective check; but neither of these corrections will compensate for the first difficulty, the shifting degree of equalization.

Table 21 illustrates (col. 8) the Federal percentages that would have been assigned to each State, using 1943-45 average per capita incomes, if the richest State got 50 percent and the poorest, 80 percent.

The bracket or step formula.--In this alternative the States are first grouped in income intervals according to their per capita income, and specific Federal percentages are then assigned to successive income intervals. States in the highest income interval are assigned the minimum Federal-aid percentages, and States in successively lower income intervals receive given percentage increments for each successive interval, so that States in the lowest income interval receive the maximum Federal-aid percentage. Most commonly these increments are 5 percent or greater, but the size is a matter of choice in these formulas.

As an illustration of the formula: if the per capita incomes ranged from $1,440 to $400 and limits of 50-75 percent were assigned to the Federal percentages, under this plan the States might be grouped

Table 21.--Federal aid percentages under various equalization matching formulas, by State

States ranked by 1943-45 per capita income	Per capita income 1943-45	Full equalization formula--50 percent pivot-point	Ratio to national average formula--50 percent pivot-point	Bracket plans		Linear formula percentages		Dual bracket: 50-55 percent for upper-income States; 55-80 percent for lower-income States in 5-percent brackets
				$20 - 1 percent intervals, 50 percent at $1,000	Full equalization bracket plan: 50 percent at national average income, 1 percent for each $22	25 percent minimum, 75 percent maximum	50 percent minimum, 80 percent maximum	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
National average..	$1,108	50	50	45	50	45	62	55
New York	1,489	33	43	26	33	25	50	50
Connecticut	1,480	33	43	26	33	25	50	50
California	1,473	34	43	26	33	26	50	50
Washington	1,441	35	43	28	35	27	51	51
Delaware	1,371	38	45	31	38	31	54	52
New Jersey	1,360	39	45	32	39	32	54	52
District of Columbia	1,313	41	46	34	41	34	55	52
Nevada	1,302	41	46	35	41	35	56	52
Illinois	1,299	41	46	35	41	35	56	52
Oregon	1,276	42	46	36	42	36	57	53
Massachusetts	1,271	43	47	36	43	36	57	53
Ohio	1,266	43	47	37	43	37	57	53
Michigan	1,260	43	47	37	43	37	57	53
Rhode Island	1,258	43	47	37	43	37	57	53
Maryland	1,222	45	48	39	45	39	58	54
Pennsylvania	1,149	48	49	43	48	43	61	54
Indiana	1,136	49	49	43	49	43	61	55
Montana	1,133	49	49	43	49	44	61	55
Wisconsin	1,091	51	50	45	51	46	62	55
Kansas	1,080	51	51	46	51	46	63	55
Maine	1,055	52	51	47	52	48	64	55
Nebraska	1,051	53	51	47	53	48	64	55
North Dakota	1,051	53	51	47	53	48	64	55
Iowa	1,044	53	51	48	53	48	64	60
Utah	1,028	54	52	49	54	49	64	60
Wyoming	1,027	54	52	49	54	49	64	60
Colorado	1,025	54	52	49	54	49	64	60
Idaho	1,008	55	52	50	55	50	65	60
Missouri	991	55	53	50	55	51	66	60
Minnesota	981	56	53	51	56	51	66	60
South Dakota	966	56	53	52	56	52	66	60
Vermont	958	57	54	52	57	53	67	60
Florida	942	57	54	53	58	53	67	60
Texas	894	60	55	55	60	56	69	65
Arizona	891	60	55	55	60	56	69	65
New Hampshire	891	60	55	55	60	56	69	65
Virginia	875	61	56	56	61	57	69	65
Oklahoma	826	63	57	59	63	59	71	65
West Virginia	776	65	59	61	65	62	72	70
Louisiana	765	65	59	62	66	63	73	70
New Mexico	755	66	59	62	66	63	73	70
Tennessee	747	66	60	63	66	64	73	70
Georgia	710	68	61	65	68	65	74	70
Kentucky	683	69	62	66	69	67	75	75
North Carolina	681	69	62	66	69	67	75	75
Alabama	660	70	63	67	70	68	76	75
South Carolina	630	72	63	69	72	70	77	75
Arkansas	597	73	65	70	73	71	78	75
Mississippi	527	75	68	74	76	75	80	80

into 26 income intervals and the size of the intervals (brackets) would be ($1,440 - $400) ÷ 26, or $40. To the first interval ($1,440 - 1,400) the initial 50 percent would be assigned, and to each successive lower income interval there would be assigned the initial 50 percent plus an additional 1 percent per interval, so that States in the lowest bracket would be assigned the maximum Federal percentage, or 75 percent.

Assuming that 1-percent intervals are used in the manner described, this plan practically retains the basic principles of the linear formula and yields corresponding results. However, the size of the income intervals, as well as absolute upper and lower limits, might be written into law and larger intervals might be selected.

If larger intervals, say, 5 percent, were chosen, States might be grouped into income intervals of perhaps $200. For States that are near the borderline, the problem of their losing or gaining such an amount because of a few dollars variation in per capita income would be a serious limitation to the use of wider intervals.

It is possible to design a bracket plan that would result in a very high degree of equalization, assuming uniform effort and small brackets. In simplest form, it involves determining the size of the intervals by dividing the per capita income in the richest State by the percentage which that State is to contribute toward the total cost of its program. For States in each successive interval below it, the State percentage would fall 1 percent, and the Federal percentage increase by 1 percent. Mathematically, this simply converts the principle of the "full equalization" formula into the bracket framework.

For example, assume that only States with per capita incomes below the national average were to benefit by the formula, that the national average were $1,000 and that the States at, or just below, that figure were to put up 50 percent. The bracket intervals would be $20, and for each $20 by which any State's per capita income fell below $1,000 it would put up 1 percent less. Thus, a State with a per capita income of $500 would put up 25 percent and get Federal aid of 75 percent (table 21, col. 5).

A "dual-bracket" formula could also be worked out, permitting a modest amount of variation for Federal percentages to one group of States (e.g., the upper-income States) and a wider degree of variation, perhaps sufficient to achieve equalization, for the remaining group. Decisions as to the first group would have to be arbitrary but could follow the given pattern for the others. An illustration of the "dual-bracket" type is found in column 9 of table 21. A bracket formula of the equalization type that yields the same percentages as the "full equalization" formula is illustrated in column 6.

Except for the special type of bracket formula that is self-adjusting and equalizing in its effect, the bracket formula contains no assurance that equalization will be achieved in any one year, or consistently over the years. If dollar brackets and corresponding percentage points were written into law, the Federal share would rise generally in times of low income, but would fall in times of high income. In an inflationary situation, it might place an unduly heavy burden on the States. Such a formula would require reconsideration after a few years' use and might be found to need changes. The automatic adjustment of the "full equalization" formula is preferable.

The ratio-to-national-average formula.--Before the development of the "full equalization" type formula, special attention was given to another automatic variable-percentage-matching formula that differed from the full-equalization formula in only one term. It related the State percentage to the Federal percentage in the same ratio as the State per capita income was related to the national average per capita income (see, for example, S. 1161, 78th Congress, and H.R. 395, 79th Congress).

By substituting the constant (50 percent or otherwise) in place of "Federal percentage" in that formula, one has the full-equalization proposal. The Federal-aid percentages which would flow from a ratio-to-national-average formula can be found in column 4 of table 21. It will be noted that these Federal percentages tend to have a narrower spread than those under the full-equalization formula.

The actual effect of the so-called ratio-to-national-average formula, were each State to make uniform fiscal effort, would be to provide a uniform Federal grant per capita. In other words, whereas 50-50 matching provides higher per capita Federal grants to higher-income States, given uniform fiscal effort, the ratio-to-national average formula would provide equalization of the amount of Federal aid. The full-equalization formula, on the other hand, would provide equalization of the combined Federal-State total.

The ratio-to-national-average formula avoids the inequities of equal (50-50) matching, but does not compensate for differences in the funds that States can raise with uniform effort--differences growing out of differences in State fiscal ability.

The School Lunch Act of 1946 8/ provides for variable matching which proves on analysis to be substantially equal to the results that would obtain under a ratio-to-national-average formula, although the method of expression of variation in matching of Federal with State funds is substantially different (see chapter IV).

8/ Public Law 396, 79th Congress, 2d session.

The 1946 amendment to public assistance.--The 1946 amendments to the public assistance titles 9/ have the indirect effect of varying the average percentage of Federal participation in each program from State to State, but not explicitly on the basis of need and ability, as proposed in this study. The extent of Federal participation since October 1, 1946, varies only with the size of the average monthly payment. The Federal Government gives two-thirds of the first $15 per month per aged or blind (or $9 per dependent child) and one-half of the remaining payments within the revised maximums. Table 22 illustrates the estimated Federal percentage 10/ in each program during the first three months of operation. The effective Federal share, it may be noted, when computed on total expenditures in the program, falls below 55 percent in States with a substantial number of payments over the matchable maximums. The Federal share cannot exceed 66 2/3 percent under the amended provisions, and in practice the highest such ratio is estimated to be 66.2 percent.

These percentages do not bear more than a mild relationship to differences in per capita income. Furthermore, they do not have as wide a range as an equalization formula would give.

In prior years, a somewhat similar formula had been proposed with three steps: Federal aid to equal two-thirds of the first $15 average monthly payment (old-age assistance and aid to the blind), one-half of the next $10, and one-third of the next $15, and no Federal aid beyond $40. This proposal was endorsed by the Treasury Committee on Intergovernmental Fiscal Relations 11/ because it helped to encourage a national minimum, but did not expand Federal aid beyond a modest maximum. The cut-back proposed in the third step would have the effect of taking away from States with high average payments most or all of the advantage of the first step, so that, if payments averaged $40 or more, the over-all Federal percentage would fall to 50 or below and involve no additional Federal outlay.

The 1946 amendments did not accept the third step, because one of the intentions of the amendment, as stated by House and Senate conferees, 12/ was to provide an additional $5 per recipient in all States, in recognition of the increases in living costs in recent months and years. The "fractional plan" amendment was added to the bill in conference committee during the closing days of the Seventy-ninth Congress, as a way of composing the differences between the two Houses.

9/ Social Security Act Amendments of 1946, title V; Public Law 719, 79th Congress, 2d session.

10/ Estimates prepared by Statistics and Analysis Division of the Bureau of Public Assistance.

11/ Federal, State, and Local Government Fiscal Relations, op. cit. p.551.

12/ See the Conference Report, No. 2724, and Congressional Record (daily edition) for July 1946, pp. 10783, 10821, and 10889-10896.

Table 22.—Percentage of Federal participation in public assistance payments, by program and by State, October-December 1946

States ranked by 1943-45 per capita income	Effective percentage of Federal aid in:			Old-age assistance average monthly payment	
	Old-age assistance 1/	Aid to the blind 1/	Aid to dependent children 1/	August 1946 2/	November 1946 3/
(1)	(2)	(3)	(4)	(5)	(6)
All approved plans.....	54.0	52.3	40.3	$31.82	$34.99
High-income group............	---	---	---	38.66	41.90
New York..................	49.0	45.2	27.2	39.15	43.06
Connecticut...............	50.8	54.3	28.7	41.78	42.12
California................	46.7	40.1	28.1	47.71	51.96
Washington................	44.2	39.5	25.2	53.79	55.02
Delaware..................	62.5	58.7	32.1	19.49	20.01
New Jersey................	53.2	53.0	37.1	33.83	39.30
District of Columbia......	53.5	51.7	40.4	34.31	39.03
Nevada....................	55.9	---	---	38.91	42.46
Illinois..................	54.3	54.9	32.9	34.97	37.42
Oregon....................	50.5	44.3	27.9	39.94	44.30
Massachusetts.............	44.9	46.9	28.4	47.42	50.26
Ohio......................	55.9	56.7	42.2	32.36	38.04
Michigan..................	56.6	56.0	32.8	33.66	35.80
Rhode Island..............	53.9	50.8	35.7	35.64	36.21
Maryland..................	58.5	57.2	59.0	28.57	32.03
Pennsylvania..............	56.6	---	37.0	31.13	34.09
Indiana...................	59.0	58.0	59.4	26.75	27.17
Montana...................	56.8	56.4	43.2	32.69	36.70
Middle-income group..........	---	---	---	33.10	35.86
Wisconsin.................	57.2	57.3	33.2	31.61	34.73
Kansas....................	55.1	52.6	38.1	31.08	34.15
Maine.....................	57.8	57.5	35.2	30.73	31.57
Nebraska..................	55.7	55.5	32.8	33.15	36.57
North Dakota..............	52.0	52.8	39.1	35.35	37.68
Iowa......................	55.2	50.7	61.5	34.38	35.16
Utah......................	51.0	45.1	27.7	39.29	45.09
Wyoming...................	48.9	47.7	34.1	41.80	48.75
Colorado..................	53.5	56.7	41.0	41.50	41.50
Idaho.....................	51.8	47.6	34.9	38.22	41.50
Missouri..................	57.3	---	60.6	29.16	34.15
Minnesota.................	54.1	50.3	47.9	34.37	34.89
South Dakota..............	58.1	59.1	55.7	27.50	32.22
Low-income group.............	---	---	---	21.87	25.43
Vermont...................	58.8	50.0	59.3	24.46	28.42
Florida...................	57.0	56.8	60.5	30.90	35.69
Texas.....................	59.1	58.6	63.6	23.42	27.68
Arizona...................	50.2	42.6	58.4	38.81	49.45
New Hampshire.............	56.9	56.5	34.3	32.83	34.17
Virginia..................	65.0	62.1	58.4	14.55	16.68
Oklahoma..................	55.9	57.4	58.0	35.63	42.14
West Virginia.............	62.8	61.5	61.0	16.39	19.57
Louisiana.................	60.0	57.4	53.2	22.93	23.68
New Mexico................	55.0	53.0	51.9	31.21	36.42
Tennessee.................	62.4	60.9	61.4	16.35	20.48
Georgia...................	66.5	64.0	62.0	13.37	14.91
Kentucky..................	64.5	63.8	59.2	11.91	17.32
North Carolina............	66.2	61.5	63.6	14.03	15.38
Alabama...................	63.1	62.3	62.7	18.27	18.79
South Carolina............	62.1	60.7	65.0	16.53	20.68
Arkansas..................	62.7	61.5	61.6	17.17	21.17
Mississippi...............	64.7	60.6	65.0	16.74	16.99
Territories:					
Alaska....................	49.9	---	55.5	41.49	42.78
Hawaii....................	57.1	53.5	37.5	25.83	26.67

1/ Estimates prepared by Bureau of Public Assistance. Plan in operation October 1, 1946–December 31, 1947: Federal funds equal 2/3 of 1st $15 of the average monthly payment for old-age assistance and aid to the blind, of 1st $9 for aid to dependent children plus 1/2 of balance. Maximum individual assistance payment fully matchable: $45 for old-age assistance and aid to the blind; for aid to dependent children, $24 for 1st child plus $15 for each additional child in the family.

2/ *Social Security Bulletin*, October 1946, p. 37.

3/ *Social Security Bulletin*, January 1947, p. 31.

The amendment was successful in raising the average monthly payment per recipient in most States, as table 22 illustrates, but it did not result in much equalization among States. The difference between the highest and the lowest average old-age assistance payments in August 1946, 2 months before the amendments, was $41.88, and in November 1946, the second month after they took effect, it was $40.11, so that the highest average was still 370 percent of the lowest average.

The amendment, it is estimated, will add about $164 million to the annual cost of Federal aid for public assistance. It was estimated that Federal expenditures under the full-equalization formula, tentatively endorsed by the social security technical staff of the House Committee on Ways and Means, would have been a little less than that amount, and that a larger part of the additional funds would have been directed into States with higher recipient rates and lower average payments.

Inasmuch as these amendments were originally limited to 15 months ending December 31, 1947, the first session of the Eightieth Congress decided to extend this legislation until June 30, 1950. The Government can, as the cost estimates show, switch to the equalization formula elaborated here without making the level of Federal aid expenditures higher. However, to make the switch will mean reduction of the Federal share in some States, in order to increase it in others.

If it is not possible to reduce the Federal share in any State, it may be necessary to modify the full-equalization formula to provide, for example, that the State share should bear the same ratio to 45 percent (instead of 50 percent) as its per capita income bears to the national average.

Or, as another alternative that would tend to assure each State that its Federal aid under an equalization formula would not be less than during 1947, the following formulas might be considered:

(1) Federal aid to be two-thirds of the first $15 of the average payment, plus the variable percentage found by the formula for the remainder within any maximums imposed.

(2) Federal aid might be the full amount of the first $5 of the average payment, plus variable percentage grants for the remainder, within any limits fixed per recipient per month.

(3) Federal aid might be a flat $2.50 per recipient, plus a variable percentage of the full amount of the average payment, within whatever reimbursable limits are fixed.

These three formulas are arranged in successive degrees of equalization, with the third permitting the highest amount of equalization. The first restricts equalization to what for some States will be a small part of the program. The second makes the initial $5 of the grant a fully Federal amount and makes equalization possible for the remainder. The third proposal is the most generous and is open to the theoretical objection that, if average payments were less than $10 in a State entitled to 75 percent Federal aid under the formula, that State would have none of its own money in the program. Since no State is now near that level, this is purely hypothetical. Should a transition between the 1946 amendments and full equalization variable matching be needed, the second may be the most acceptable of the alternatives.

The "minimum total payment" plan.--With the growing sentiment to ensure that recipients have a substantial minimum payment,[13] it has been proposed by some that Federal aid be the difference between $30 or $35 per recipient per month and a State contribution (actual or assumed) of 1 percent of per capita income per recipient per month.[14] A State with a per capita income of $1,500 would thus be expected to put up $15 per recipient per month (sanctions could be developed, such as proportionate reduction in Federal aid, to help assure that effort); and that State would get Federal aid of $15 or $20 per recipient. If it chose to pay more than $35, it would have to do so out of its own funds.

A State with per capita income of $1,000 would then get $20 or $25 of Federal funds per recipient per month, and one with only $500 per capita income might get $25 or $30. This plan is a device to assure a national minimum average payment. It would cost the Federal Government more than the other equalization proposals, given the levels suggested, but would assure substantial increases in average payments in States where they are now well below such a minimum. A modification for the aid to dependent children program might be $60 or $70 per family, with a minimum State contribution of 2 percent of per capita income per aided family per month.

If the Federal Government were to participate in payments in excess of a national minimum average payment, this type of formula could be combined with 50-50 matching, or with variable percentage matching, on average payments in excess of that figure, with or without an upper limit to reimbursable State expenditures.

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[13] Such a move would substantially change the existing basis of the public assistance program. Payments now are intended to reflect the difference between a recipient's "requirements" and his other income, or "resources," the difference being his "need" for public assistance. If "needs" of recipients are generally marginal, low average payments will appear, yet the low average would not mean that "needs" were being neglected. There is no logical place in the present program for a substantial minimum payment to each recipient. Furthermore, comparative average payments are only suggestive, not conclusive, evidence of equity or uniformity of program levels among jurisdictions.

[14] This is a more modest proposal than those which would provide Federal aid to the extent of a fixed amount per month (often larger than $35) per recipient or per aged person.

If recipient rates of the States were more nearly uniform, this would be a fairly adequate equalization formula. It represents a rather complete break with the previous bases of reimbursement for State public assistance expenditures and would practically underwrite a minimum grant, without regard to State estimates of assistance need. It would move in the direction of the "Townsend" type of Federal program.

The values suggested above for State effort and "minimum total payment" are so adapted to current per capita income and average payments data as to require little if any increase in State effort and little if any decrease in Federal aid. The formula is not readily adaptable to other Federal grant programs, although it is similar in certain respects to S. 472, the recent education aid proposal introduced by Senator Taft, for himself and others, which is discussed in chapter XII.

Medical assistance formulas.--States may now use Federal aid for money payments that include consideration of the medical needs of public assistance recipients, within the dollar limits on monthly payments. If the upper-limit on reimbursable monthly expenditures were lifted, at least for medical expenditures, whatever reimbursement formula is used for public assistance would also provide for this type of medical assistance.15/ Certain limited medical services can also be included in administrative expenditures subject to Federal reimbursement.

Even if these provisions met the medical needs of public assistance recipients, there are many persons in the low-income groups who can meet the cost of other necessities of life, but cannot, unaided, meet their medical bills. Two major lines of approach have been proposed to solve their problem of paying for medical care. One, found in the Wagner-Murray-Dingell bills, seeks to provide such help as part of a comprehensive social insurance system. The other contemplates Federal aid for a special program of aid to the "medically needy."

An illustration of the second approach can be found in S. 545 (80th Congress).16/ It authorizes, for "general medical service for families and individuals with low income," $200 million of Federal aid annually, each Federal dollar to be matched by a non-Federal dollar--the financial contribution of the State and its subdivisions to at least equal the amount contributed for similar purposes in 1946.

Federal aid would be allocated according to the product of State population and the State's "percentage of taxpaying ability," which is defined as that percentage which bears the same ratio to 50 percent

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15/ See, for example, H.R. 3636 of the 80th Congress, the Forand bill "to establish more adequate public-welfare programs."

16/ Or see Title I, Part C, of S. 1606 of the 79th Congress, the Wagner-Murray bill proposing "grants to States for medical care of needy persons."

Table 23.--Analysis of Federal aid and minimum State contribution for medical care services under S.545, part B

States ranked by 1943-45 per capita income	Population, July 1945 (excluding armed forces overseas)	Per capita income, 1945	"Percentage of taxpaying ability"	Product of population and "percentage of taxpaying ability"	Federal allotments of $200 million (also = minimum State contribution)	Per capita amounts:		State-local funds (minimum) as percent of State income payments, 1945
						Federal or State alone	Federal and State total	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
United States...	131,975,774	$1,150	---	67,398,200	$200,000,000	$1.52	$3.04	0.13%
High-income group......	72,297,299	---	---	---	91,641,000	1.27	2.54	.09
New York...........	12,584,913	1,595	36	4,530,569	13,444,000	1.07	2.14	.07
Connecticut.........	1,786,300	1,449	40	714,520	2,120,000	1.19	2.38	.08
California..........	8,622,688	1,480	39	3,440,848	10,211,000	1.16	2.32	.08
Washington..........	2,088,574	1,407	41	856,315	2,541,000	1.22	2.44	.09
Delaware............	286,832	1,381	42	120,469	357,000	1.24	2.48	.09
New Jersey..........	4,200,941	1,373	42	1,764,395	5,236,000	1.25	2.50	.09
District of Columbia	938,458	1,361	42	394,152	1,170,000	1.25	2.50	.07
Nevada..............	159,804	1,243	46	73,510	218,000	1.36	2.72	.11
Illinois............	7,721,099	1,360	42	3,242,862	9,623,000	1.25	2.50	.09
Oregon..............	1,206,322	1,266	45	542,845	1,611,000	1.34	2.68	.10
Massachusetts.......	4,183,179	1,321	44	1,840,599	5,462,000	1.31	2.62	.10
Ohio................	6,873,448	1,289	45	3,093,052	9,178,000	1.34	2.68	.10
Michigan............	5,471,774	1,212	47	2,571,734	7,631,000	1.39	2.78	.11
Rhode Island........	758,222	1,268	45	341,200	1,013,000	1.34	2.68	.11
Maryland............	2,125,419	1,212	47	998,947	2,964,000	1.39	2.78	.12
Pennsylvania........	9,193,957	1,199	48	4,413,099	13,096,000	1.42	2.84	.12
Indiana.............	3,437,745	1,152	50	1,718,872	5,101,000	1.48	2.96	.13
Montana.............	457,624	1,172	49	224,236	665,000	1.45	2.90	.12
Middle-income group....	18,551,434	---	---	---	28,963,000	1.56	3.12	.14
Wisconsin...........	2,952,205	1,161	50	1,476,103	4,380,000	1.48	2.96	.13
Kansas..............	1,740,379	1,113	52	904,997	2,686,000	1.54	3.08	.14
Maine...............	785,913	1,051	55	432,252	1,283,000	1.63	3.26	.15
Nebraska............	1,198,492	1,117	51	611,231	1,814,000	1.51	3.02	.13
North Dakota........	520,935	1,123	51	265,677	788,000	1.51	3.02	.13
Iowa................	2,259,526	1,109	52	1,174,954	3,487,000	1.54	3.08	.14
Utah................	616,989	1,023	56	345,514	1,025,000	1.66	3.32	.16
Wyoming.............	246,766	1,096	52	128,318	381,000	1.54	3.08	.14
Colorado............	1,120,595	1,100	52	582,709	1,729,000	1.54	3.08	.14
Idaho...............	500,109	1,054	55	275,060	816,000	1.63	3.26	.16
Missouri............	3,556,693	1,063	54	1,920,614	5,699,000	1.60	3.20	.15
Minnesota...........	2,497,485	1,061	54	1,348,642	4,002,000	1.60	3.20	.15
South Dakota........	555,347	1,083	53	294,334	873,000	1.57	3.14	.15
Low-income group.......	41,127,041	---	---	---	79,396,000	1.93	3.86	.24
Vermont.............	310,352	1,023	56	173,797	516,000	1.66	3.32	.16
Florida.............	2,385,917	996	58	1,383,832	4,106,000	1.72	3.44	.17
Texas...............	6,786,740	917	63	4,275,646	12,688,000	1.87	3.74	.20
Arizona.............	630,298	918	63	397,088	1,178,000	1.87	3.74	.20
New Hampshire.......	452,174	971	59	266,783	792,000	1.75	3.50	.18
Virginia............	3,079,706	903	64	1,971,012	5,849,000	1.90	3.80	.23
Oklahoma............	2,034,460	889	65	1,322,399	3,924,000	1.93	3.86	.22
West Virginia.......	1,724,677	839	66 2/3	1,149,790	3,412,000	1.98	3.96	.23
Louisiana...........	2,456,057	785	66 2/3	1,637,380	4,859,000	1.98	3.96	.25
New Mexico..........	535,220	812	66 2/3	356,815	1,059,000	1.98	3.96	.25
Tennessee...........	2,878,777	813	66 2/3	1,919,194	5,695,000	1.98	3.96	.24
Georgia.............	3,191,766	745	66 2/3	2,127,855	6,314,000	1.98	3.96	.27
Kentucky............	2,578,179	735	66 2/3	1,718,795	5,100,000	1.98	3.96	.27
North Carolina......	3,504,626	732	66 2/3	2,336,429	6,933,000	1.98	3.96	.27
Alabama.............	2,812,301	700	66 2/3	1,874,877	5,564,000	1.98	3.96	.28
South Carolina......	1,905,597	663	66 2/3	1,270,404	3,770,000	1.98	3.96	.30
Arkansas............	1,779,817	654	66 2/3	1,186,551	3,521,000	1.98	3.96	.30
Mississippi.........	2,080,377	556	66 2/3	1,386,925	4,116,000	1.98	3.96	.36

as national per capita income bears to that State's per capita income (subject to an upper limit of 66 2/3 percent). One way of expressing the difference between this bill and the basic equalization formula of this study 17/ is to say that S. 545 starts with the same basic factors, but in effect switches from a State to a Federal percentage by inverting the relationship of State and national per capita income. The significance of the difference between the two equations can be seen from a comparison of the percentages shown in column 4 of table 23 against those in column 3 of table 21. If there were not a 66 2/3 percent limit, moreover, all States with per capita incomes one-half or less of the national average would have shown "percentages of taxpaying ability" of 100 percent or more.

These percentages as thus computed are used to weight the population for purposes of allocation of Federal funds. They do operate so as to assure a greater amount of Federal aid, proportionately, to the low-income States. However, no provision is made in the bill for equalization in the matching provisions. On the contrary, the bill provides, in effect, 50-50 matching. As a result, differences in fiscal ability among States are linked with differential allocations in such a way as to require five times as much effort of a low-income State to secure its allotment as is required of a high-income State (see column 9 of table 23).

Equalization-Matching Formula Best Choice

None of the alternatives combines so well as does the full-equalization formula the measures of need and fiscal ability in a formula for securing greater equalization within the public assistance program, while maintaining the established pattern of State control over the size of each individual payment, the general level of payment, and determination of eligibility.

The equalization-matching proposal is not intended to provide equal payments to all recipients in all States, but only to insure that each State subject to the formula has an equal opportunity to provide public assistance. In all probability the lower-income States will continue to have the higher recipient rates, so that even with equal or slightly greater fiscal effort, they may not be able to make payments averaging as high as those of more prosperous States, even with Federal aid computed on an equalization-matching basis. Until better measures of State differences in fiscal ability and in welfare need (especially the latter) have been developed, such a formula using per capita income is the closest it is possible to come to equalization. The basic pattern is sound, and better measures can readily be introduced to step up the degree of equalization at a subsequent time, as that proves feasible.

17/ Or that in Title III of S. 1320, the Wagner-Murray bill of the 80th Congress.

CHAPTER XI

PUBLIC HEALTH EQUALIZATION FORMULAS

Public health encompasses not only a general public health program, but a number of special programs as well. The general health program includes a whole range of services now so widely practiced as to be taken for granted. These include basic sanitation which helps to ensure a safe water and milk supply as well as the observance of proper sanitary conditions in food stores, restaurants, barber shops, and a host of other places where careless practices could endanger the public health. The general health program includes enforcement of quarantine laws, widespread inoculation and vaccination, public health nursing, maintenance and tabulation of health records, public health laboratories serving the health specialists and the public, and many other services.

The special health programs have grown over the years, starting with venereal disease control, and now include such varied services as those dealing with mental health, tuberculosis, maternal and child health, crippled children, and cancer. With few exceptions, the special public health programs have been the responsibility of the same agencies (Federal, State, and local) as are concerned with the general health program, for a coordinated attack on all health problems demands unity of direction at each level. Over the years, many special health problems have been the subject of intensive work, often with outstanding success. Diphtheria and smallpox are almost unknown in this country now, and a few recent cases of smallpox occasioned great interest and activity. Because many special problems can be virtually eliminated by intensive work throughout the Nation over a period of years, it may be appropriate for the Federal Government to specify, as it has, that certain funds shall be used by the States for specific purposes.

However, so much has been earmarked that aid for special programs now far outweighs aid for the basic general health program. If there is to be any recognition of State and local differences in public health problems, there must be sufficient freedom of action left to the States and localities so that they can direct primary attention at what they know to be their primary problems.

In such a setting, the Federal-State general public health program may deserve, as requested by the State and Territorial health officers in December 1946, greater Federal support. The special health programs depend on the framework provided by the general health program, and therefore may properly be subordinate to the general program. The selective approach to public health, in the words of Surgeon-General Parran, "has resulted in some unevenness in development and some difficulty in administration" even though "the record clearly shows substantial progress through this approach."1/ Perhaps the present special programs will, after a period of years, become as much a part of the general program as have the earlier special programs against smallpox, typhoid fever, and diphtheria.

1/ Statement of July 9, 1947, before the subcommittee on health of the Senate Committee on Labor and Public Welfare.

The General Public Health Grants

At present, grants for the general public health program are limited in amount and are allocated among States under a formula devised by the Public Health Service in accordance with basic statutory criteria. There has been considerable support for an increase in Federal aid for the general health program, and the Wagner-Murray-Dingell bills of 1945 2/ would have provided an open-end Federal aid, very much like that for public assistance, authorizing whatever amount would be required to reimburse each State for its Federal share of public health expenditures.

An open-end system of grants for public health work could be equalizing if it operated under an equalization matching percentage formula of the type discussed for public assistance. The Wagner-Murray-Dingell bills proposed a 50 percent "pivot-point," so that the Federal-aid percentages for the low-income States would be the same under both the public health and the assistance titles. An alternative might have been to have a pivot-point for the public health grants such that the average Federal share would be more or (more likely) less than half the total of Federal and State funds. A decision to be more or less generous with the States in public health than in public assistance grants could lead to undesirable competition for State money by separate programs of the same Federal agency.

An open-end grant for general public health work might encourage expansion of State programs. The concept of what constitutes public health is a developing one, as the science and the art of healing and preventing disease improve. Health efficiency and governmental economy may be somewhat in conflict here, and the choice between them becomes essentially a policy rather than a technical decision.

It may be hard to write a legal definition of what is public health that will keep the aid under an open-end system within the intended limits. If so, there is the possibility that even if Federal aid for public health is enlarged, limits may be placed on the amount of aid. A decision to limit the annual amount of Federal aid for an expanded general public health program would continue to make necessary an allotment formula. Two major types of alternatives are discussed below: (1) those based on population and "financial need," and (2) those based on expenditures for public health functions. Tables 24-27 show how various proposals might work out--State by State--as to Federal allotments and per capita totals; for the sake of simplicity, in all cases, $100 million is assumed to be available for Federal grants.

It is assumed that equalization as heretofore defined and implemented through the basic formula discussed above is intended to form

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2/ S. 1606 and H.R. 4730 in the 79th Congress. S. 1320, the Wagner-Murray bill in the 80th Congress, provides, in title III, a limited amount of aid during the first 5 years, and a sum sufficient, or open-end grant, thereafter.

Table 24.--Analysis of allotment of $100 million Federal aid based solely on 1945 (civilian) population, with full equalization matching

States ranked by 1943-45 per capita income	Federal allotment (in thousands)	Non-Federal matching needed 1/ (in thousands)	Total funds (in thousands)	Per capita amounts		
				Federal	Non-Federal	Total
53 States......	$100,000	$111,949	$211,949	$0.769	$0.861	$1.630
New York...........	9,496	19,280	28,776	.769	1.561	2.331
Connecticut........	1,361	2,762	4,123	.769	1.561	2.331
California.........	6,247	12,127	18,374	.769	1.493	2.263
Washington.........	1,503	2,791	4,294	.769	1.428	2.198
Delaware...........	213	348	562	.769	1.255	2.024
New Jersey.........	3,157	4,939	8,096	.769	1.203	1.972
Dist. of Col.......	644	926	1,570	.769	1.107	1.876
Nevada.............	104	150	255	.769	1.107	1.876
Illinois...........	5,807	8,356	14,163	.769	1.107	1.876
Oregon.............	918	1,268	2,187	.769	1.062	1.831
Massachusetts......	3,144	4,167	7,311	.769	1.019	1.789
Ohio...............	5,249	6,958	12,207	.769	1.019	1.789
Michigan...........	4,181	5,543	9,724	.769	1.019	1.789
Rhode Island.......	538	713	1,250	.769	1.019	1.789
Maryland...........	1,552	1,897	3,450	.769	.940	1.709
Pennsylvania.......	7,034	7,620	14,653	.769	.833	1.602
Indiana............	2,606	2,712	5,318	.769	.800	1.570
Montana............	348	362	710	.769	.800	1.570
Wisconsin..........	2,257	2,169	4,426	.769	.739	1.508
Kansas.............	1,274	1,224	2,499	.769	.739	1.508
Maine..............	594	549	1,143	.769	.710	1.479
Nebraska...........	889	788	1,678	.769	.682	1.451
North Dakota.......	400	355	754	.769	.682	1.451
Iowa...............	1,720	1,526	3,246	.769	.682	1.451
Utah...............	455	388	843	.769	.655	1.424
Wyoming............	180	154	334	.769	.655	1.424
Colorado...........	816	695	1,510	.769	.655	1.424
Idaho..............	354	290	643	.769	.629	1.398
Missouri...........	2,679	2,192	4,870	.769	.629	1.398
Minnesota..........	1,912	1,502	3,413	.769	.604	1.373
South Dakota.......	405	318	723	.769	.604	1.373
Vermont............	239	180	419	.769	.580	1.349
Florida............	1,584	1,195	2,780	.769	.580	1.349
Texas..............	4,876	3,250	8,127	.769	.512	1.282
Arizona............	453	302	756	.769	.512	1.282
New Hampshire......	343	229	572	.769	.512	1.282
Virginia...........	2,162	1,382	3,544	.769	.491	1.261
Oklahoma...........	1,494	877	2,371	.769	.451	1.221
West Virginia......	1,321	711	2,032	.769	.414	1.183
Louisiana..........	1,803	970	2,774	.769	.414	1.183
New Mexico.........	377	194	572	.769	.396	1.165
Tennessee..........	2,179	1,122	3,302	.769	.396	1.165
Georgia............	2,310	1,187	3,397	.769	.362	1.131
Kentucky...........	1,939	871	2,810	.769	.345	1.114
North Carolina.....	2,565	1,152	3,717	.769	.345	1.114
Alabama............	2,099	900	2,998	.769	.329	1.099
South Carolina.....	1,383	538	1,921	.769	.299	1.068
Arkansas...........	1,321	489	1,809	.769	.284	1.053
Mississippi........	1,531	510	2,041	.769	.256	1.025
Alaska.............	58	58	116	.769	.769	1.538
Hawaii.............	327	327	657	.769	.076	1.538
Puerto Rico........	1,577	526	2,103	.769	.256	1.025
Virgin Islands.....	20	7	27	.769	.256	1.025

1/ This series is based on the Federal allotment to each State multiplied by the ratio of the State percentage (col. 8 of table 19) to the Federal percentage (col. 4 of table 19) for that State. The Federal percentage for the territories is shown on table 26.

the basis for revision in public health allotment and matching procedures. That is, it should be possible for the poorest State, by exertion of comparable fiscal effort, to have as good a program (in terms of dollars per capita expended for public health) as the richest State, within the limits of Federal aid available.

Allotments Based on Population and Financial Need

A very simple way to allot $100 million would be by population, each State getting about 77 cents per capita in Federal aid. Many Federal grants now give weight to population as an acceptable measure of need. However, if Federal aid were allotted on this basis alone, and States were expected to match in accordance with a variable-matching formula, the richer States would have a greater program per capita than the poorer States, since they would be matching Federal aid at higher ratios than the poor States. Table 24 illustrates the effect of such an allotment. Actually, if a public health program is to vary from full equalization as defined above, it probably ought to vary in the other direction, so that there would be a greater total number of dollars per capita for public health expenditure in the poorer States, where the need for public health services might presumably be greater.

A slightly more complex formula would allot money on the basis of population weighted by a measurement of "financial need" (in terms of language now used in the Public Health Service Act), or by a measurement of financial ability (in terms of language used in public assistance proposals). In either case, population would be multiplied by a factor dependent on per capita income. The Public Health Service now allocates part of its grants on the basis of population multiplied by the reciprocal of the State's per capita income. This gives the greatest weight to the population of the poorest State and the smallest weight to the richest State, with others arrayed in between. With $100 million to distribute, Federal aid would be about 53 cents per capita in the richest State and $1.48 per capita in the poorest State, with the State at the national average drawing about 71 cents per capita. When the amounts of State and local funds required by an equalization-matching formula are added to these allotments, however, it is found that this method results in progressively larger total per capita amounts in States progressively farther from the national average in either direction. The lowest total (in this case, $1.41) would be available in the "average State," whose per capita income equalled the national average, whereas the richest State would have a total of $1.59 and the poorest State would have a total amount of $1.98. The reason, mathematically, for this surprising turn of affairs is that the use of the reciprocal of a linear series results in a parabolic curve, rather than a straight line. The seeming equity of such a distribution of Federal aid is noticeably weakened when combined with a full equalization matching formula (see table 25).

A true equalization allotment for the Federal funds would multiply population by the Federal percentage derived under the equalization

Table 25.--Analysis of allotment of $100 million Federal aid based on 1945 civilian population weighted by the reciprocal of per capita income, with full equalization matching

State ranked by 1943-45 per capita income	Civilian population divided by per capita income (1943-45)	Federal allotment (in thousands)	Non-Federal matching needed 1/ (in thousands)	Total funds (in thousands)	Per capita amounts		
					Federal	Non-Federal	Total
53 States....	127,797.08	$100,000	$97,228	$197,228	$0.769	$0.748	$1.517
New York..........	8,290.76	6,487	13,170	19,657	.525	1.067	1.592
Connecticut........	1,195.00	935	1,898	2,834	.529	1.073	1.602
California.........	5,512.63	4,314	8,374	12,687	.531	1.031	1.562
Washington.........	1,355.81	1,061	1,970	3,031	.543	1.008	1.551
Delaware...........	202.37	158	258	417	.571	.931	1.502
New Jersey.........	3,017.78	2,361	3,693	6,055	.575	.900	1.475
Dist. of Col.......	637.40	499	718	1,216	.596	.858	1.454
Nevada.............	104.22	82	117	199	.601	.865	1.466
Illinois...........	5,810.71	4,547	6,543	11,090	.602	.867	1.469
Oregon.............	935.50	732	1,011	1,743	.613	.847	1.460
Massachusetts......	3,214.95	2,516	3,335	5,851	.616	.816	1.432
Ohio...............	5,389.52	4,217	5,590	9,808	.618	.819	1.437
Michigan...........	4,313.57	3,375	4,474	7,850	.621	.823	1.444
Rhode Island.......	555.57	435	576	1,011	.622	.825	1.447
Maryland...........	1,651.37	1,292	1,579	2,871	.640	.783	1.423
Pennsylvania.......	7,957.18	6,226	6,745	12,971	.681	.738	1.419
Indiana............	2,981.92	2,333	2,429	4,762	.689	.717	1.406
Montana............	399.40	312	325	638	.691	.719	1.409
Wisconsin..........	2,689.32	2,104	2,022	4,126	.717	.689	1.406
Kansas.............	1,533.88	1,200	1,153	2,353	.725	.696	1.421
Maine..............	732.34	573	529	1,102	.742	.685	1.426
Nebraska...........	1,099.66	860	763	1,624	.745	.660	1.405
North Dakota.......	494.49	387	343	730	.745	.660	1.405
Iowa...............	2,141.96	1,676	1,486	3,162	.750	.665	1.414
Utah...............	575.79	451	384	834	.761	.648	1.410
Wyoming............	228.39	179	152	331	.762	.649	1.411
Colorado...........	1,034.38	809	690	1,499	.763	.650	1.413
Idaho..............	456.29	357	292	649	.776	.635	1.411
Missouri...........	3,513.57	2,749	2,250	4,999	.790	.646	1.436
Minnesota..........	2,533.12	1,982	1,557	3,540	.798	.627	1.424
South Dakota.......	545.14	427	335	762	.810	.636	1.446
Vermont............	323.81	253	191	445	.817	.616	1.433
Florida............	2,186.31	1,711	1,291	3,001	.831	.627	1.457
Texas..............	7,089.83	5,548	3,699	9,246	.875	.584	1.459
Arizona............	661.30	517	345	862	.878	.586	1.464
New Hampshire......	500.48	392	261	653	.878	.586	1.464
Virginia...........	3,211.75	2,513	1,607	4,120	.894	.572	1.466
Oklahoma...........	2,350.48	1,839	1,080	2,919	.947	.556	1.504
West Virginia......	2,212.52	1,731	932	2,664	1.008	.543	1.551
Louisiana..........	3,063.28	2,397	1,291	3,688	1.022	.551	1.574
New Mexico.........	649.41	508	262	770	1.036	.534	1.570
Tennessee..........	3,791.81	2,967	1,529	4,496	1.047	.540	1.587
Georgia............	4,229.43	3,309	1,557	4,867	1.102	.519	1.621
Kentucky...........	3,690.39	2,888	1,297	4,185	1.145	.515	1.660
North Carolina.....	4,895.74	3,831	1,721	5,552	1.149	.516	1.665
Alabama............	4,133.52	3,234	1,386	4,621	1.186	.508	1.694
South Carolina.....	2,853.31	2,233	868	3,101	1.242	.483	1.725
Arkansas...........	2,875.95	2,250	832	3,083	1.311	.485	1.796
Mississippi........	3,776.23	2,955	985	3,940	1.484	.495	1.980
Alaska.............	67.69	53	53	106	.706	.706	1.412
Hawaii.............	383.57	300	300	600	.706	.706	1.412
Puerto Rico........	3,700.36	2,895	965	3,861	1.412	.471	1.883
Virgin Islands.....	46.93	37	12	49	1.412	.471	1.883

1/ This series is based on the Federal allotment to each State multiplied by the ratio of the State percentage (col. 8 of table 19) to the Federal percentage (col. 4 of table 19) for that State. The Federal percentage for the territories is shown on table 26.

matching formula. This would result in a uniform total per capita of Federal and State funds. The equalization feature of the allotment would then perfectly complement the equalization feature of the matching. The allotments and required matching under this approach are illustrated in table 26. A formula similar to this is embodied in S. 1320, the Wagner-Murray bill in the 80th Congress--the bill, however, places a lower limit of 50 percent on the Federal percentage, both for allocation and matching.

Allotments Based on Public Health Expenditures

As an alternative to allotments based on a composite of population and financial need (or financial ability), it would be possible to allocate a specified annual amount of Federal aid on the basis of the amounts spent by the various States for public health during some recent fiscal year, or on the basis of the amounts it is proposed to spend during a coming year. One could use either the amount from Federal, State, and local sources, or from State-local sources only. In any case, the basic principle, mathematically, would be the same.

In principle, the method used would be to determine a series of "expenditure percentages," one for each State and for Federal aid to each State. The State expenditure percentages would vary directly, and the Federal expenditure percentages inversely, with per capita income. But instead of varying the State expenditure percentages about an average of 50 percent, the expenditure percentages would be varied, from year to year, about an average State expenditure percentage that would reflect for that year the percentage which all State and local expenditures are of total Federal-State-local expenditures for public health.3/

In applying this method, several alternatives are available, including the use of past expenditures, proposed expenditures, and the computation of the Federal aid on the basis of ratios to match State-local expenditures rather than as a percent of a Federal-State-local total.

1. Given complete annual State reports on the totals that had been spent from Federal, State, and local sources for public health, the formula could be applied directly to allocate the available Federal funds on an equalization basis.

3/ Some such procedure was apparently contemplated in the National Health bill of 1939, S. 1620 of the 76th Congress, at least during the years for which the amounts of Federal aid were limited to stated amounts by the bill.

Table 26.- Illustration of full equalization allotment and matching of $100 million Federal aid, based on population multiplied by Federal equalization matching percentage

States ranked by 1943-45 per capita income	Civilian population, 1945	Federal matching percentage	Weighted population	Federal allotment (in thousands)	Non-Federal matching needed 1/ (in thousands)	Total funds (in thousands)	Per capita amounts		
							Federal	Non-Federal	Total
53 States	129,985,297	50	6,538,182,612	$100,000	$98,809	$198,809	$0.77	$0.76	$1.53
New York	12,343,450	33	407,333,850	6,231	12,649	18,879	.50	1.02	1.53
Connecticut	1,768,602	33	58,363,866	893	1,812	2,705	.50	1.02	1.53
California	8,120,105	34	276,083,570	4,223	8,197	12,420	.52	1.01	1.53
Washington	1,953,725	35	68,380,375	1,046	1,942	2,988	.54	.99	1.53
Delaware	277,455	38	10,543,290	161	263	424	.58	.95	1.53
New Jersey	4,104,176	39	160,062,864	2,448	3,829	6,277	.60	.93	1.53
District of Columbia	836,900	41	34,312,900	525	755	1,280	.63	.90	1.53
Nevada	135,689	41	5,563,249	85	122	208	.63	.90	1.53
Illinois	7,548,109	41	309,472,469	4,733	6,811	11,545	.63	.90	1.53
Oregon	1,193,702	42	50,135,484	767	1,059	1,826	.64	.89	1.53
Massachusetts	4,086,197	43	175,706,471	2,687	3,562	6,250	.66	.87	1.53
Ohio	6,823,137	43	293,394,891	4,487	5,949	10,436	.66	.87	1.53
Michigan	5,435,092	43	233,708,956	3,575	4,738	8,313	.66	.87	1.53
Rhode Island	698,903	43	30,052,829	460	609	1,069	.66	.87	1.53
Maryland	2,017,971	45	90,808,695	1,389	1,698	3,086	.69	.84	1.53
Pennsylvania	9,142,797	48	438,854,256	6,712	7,271	13,983	.73	.80	1.53
Indiana	3,387,463	49	165,985,687	2,539	2,642	5,181	.75	.78	1.53
Montana	452,519	49	22,173,431	339	353	692	.75	.78	1.53
Wisconsin	2,934,044	51	149,636,244	2,289	2,199	4,488	.78	.75	1.53
Kansas	1,656,588	51	84,485,988	1,292	1,242	2,534	.78	.75	1.53
Maine	772,621	52	40,176,292	614	567	1,182	.80	.73	1.53
Nebraska	1,155,744	53	61,254,432	937	831	1,767	.81	.72	1.53
North Dakota	519,709	53	27,544,577	421	374	795	.81	.72	1.53
Iowa	2,236,203	53	118,518,759	1,813	1,608	3,420	.81	.72	1.53
Utah	591,910	54	31,963,140	489	416	905	.83	.70	1.53
Wyoming	234,553	54	12,665,862	194	1,650	359	.83	.70	1.53
Colorado	1,060,239	54	57,252,906	876	746	1,622	.83	.70	1.53
Idaho	459,938	55	25,296,590	387	317	703	.84	.69	1.53
Missouri	3,481,949	55	191,507,195	2,929	2,397	5,326	.84	.69	1.53
Minnesota	2,484,993	56	139,159,608	2,128	1,672	3,801	.86	.67	1.53
South Dakota	526,607	56	29,489,992	451	354	805	.86	.67	1.53
Vermont	310,211	57	17,682,027	270	204	474	.87	.66	1.53
Florida	2,059,505	57	117,391,785	1,795	1,355	3,150	.87	.66	1.53
Texas	6,338,309	60	380,298,540	5,817	3,878	9,694	.92	.61	1.53
Arizona	589,221	60	35,353,260	541	360	901	.92	.61	1.53
New Hampshire	445,930	60	26,755,800	409	273	682	.92	.61	1.53
Virginia	2,810,278	61	171,426,958	2,622	1,676	4,298	.93	.60	1.53
Oklahoma	1,941,499	63	122,314,437	1,871	1,099	2,969	.96	.57	1.53
West Virginia	1,716,914	65	111,599,410	1,707	919	2,626	.99	.54	1.53
Louisiana	2,343,406	65	152,321,390	2,330	1,255	3,584	.99	.54	1.53
New Mexico	490,302	66	32,359,932	495	255	750	1.01	.52	1.53
Tennessee	2,832,480	66	186,943,680	2,859	1,473	4,332	1.01	.52	1.53
Georgia	3,002,896	68	204,196,928	3,123	1,470	4,592	1.04	.59	1.53
Kentucky	2,520,537	69	173,917,053	2,660	1,195	3,855	1.06	.47	1.53
North Carolina	3,333,999	69	230,045,931	3,518	1,581	5,099	1.06	.47	1.53
Alabama	2,728,120	70	190,968,400	2,921	1,252	4,173	1.07	.46	1.53
South Carolina	1,797,583	72	129,425,976	1,980	770	2,749	1.10	.43	1.53
Arkansas	1,716,944	73	125,336,912	1,917	709	2,626	1.12	.41	1.53
Mississippi	1,990,073	75	149,255,475	2,283	761	3,044	1.15	.38	1.53
Alaska	75,000	50	3,750,000	57	57	114	.76	.76	1.53
Hawaii	425,000	50	21,250,000	325	325	650	.76	.76	1.53
Puerto Rico	2,050,000	75	153,750,000	2,352	784	3,135	1.15	.38	1.53
Virgin Islands	26,000	75	1,950,000	30	10	40	1.15	.38	1.53

1/ This series is based on the Federal allotment to each State multiplied by the ratio of (100 minus the Federal matching percentage) to the Federal matching percentage.

2. An alternative would be to base the Federal allotments on prospective expenditures, using budget plans submitted by the States and the equalization formula outlined above. It is almost certain that this method would encourage States to submit budget plans beyond their means--and it might lead to competition in the submission of grandiose plans bearing less and less relationship to reality. Even if this difficulty could be avoided by one means or another, it would necessitate extensive plan review activities at the Federal level and would seem to result in increasing the Federal control over details of State-local health activities.

3. Another alternative would base the allocations on the public health expenditures from State and local sources only. Federal aid could be computed from a series of matching ratios derived from the variable-grants formula and might be expressed as follows: The Federal allotment shall bear the same relationship to each State's expenditures for public health from its own and local sources as k times the national per capita income less that State's per capita income bears to that State's per capita income. In this formula, "k" represents the quotient resulting from dividing 100 percent by the average State expenditure percentage (which percentage is, in turn, the quotient obtained by dividing the reported State and local expenditures by the sum of these expenditures plus Federal aid). This method permits the use of past State-local expenditures, and thus greater certainty of Federal allotments, yet avoids giving weight to prior Federal aid allotments. See table 27 for illustration of its use.

Comparison of the General Health Alternatives in Summary

Allotment of a fixed sum.--Broadly speaking, the group of alternatives based on population and financial need has the effect of fixing the Federal aid within a framework of factors not directly subject to a State's control. Furthermore, when coupled with variable-matching requirements, this type of allotment of a fixed sum of Federal aid has a direct tendency to determine the exact size of the Federal-State-local public health programs--a State could go beyond the prescribed program only by "going it alone," for no additional Federal aid would be made available beyond the prescribed program.

On the other hand, allotments based on State-local expenditures or budgets and per capita income give each State an amount of Federal aid according to its effort as contrasted with the efforts of other States. The same full-equalization matching formula is applied, in all cases, but its effect when combined with grants based on expenditures is to give Federal aid not only with regard to "financial need," but

Table 27.--Analysis of use of State-local expenditures for public health (1945) in allocation of $100 million Federal aid with equalization matching ratios

States ranked by 1943-45 per capita income	Average per capita income, 1943-45	(K times) national per capita income) 1/ less State per capita income	Federal matching ratio: col. (3) ÷ col. (2)	State and local expenditures from own funds for public health fiscal 1945 2/ (in thousands)	Federal allotments (preliminary) 3/ col. (4) x col. (5) (in thousands)	Final 3/ Federal allotments (in thousands)	Total funds (in thousands)	Per capita amounts		
								Federal	State-local	Total
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
53 States....	$1,108	$1,050	0.9477	$105,562	$114,129	$100,000	$205,562	$0.77	$0.81	$1.58
New York........	1,489	699	.4493	13,526	6,077	5,325	18,851	.43	1.10	1.53
Connecticut.....	1,480	678	.4581	1,732	793	695	2,427	.39	.98	1.37
California......	1,473	685	.4650	7,140	3,320	2,909	10,050	.36	.88	1.24
Washington......	1,441	717	.4976	2,092	1,041	912	3,003	.47	1.07	1.54
Delaware........	1,371	787	.5740	324	187	164	488	.59	1.17	1.76
New Jersey......	1,360	798	.5868	712	418	366	1,078	.07	.17	.26
Dist. of Col....	1,313	845	.6436	4,415	2,841	2,490	6,904	2.97	5.28	8.25
Nevada..........	1,302	856	.6575	80	52	46	125	.34	.59	.92
Illinois........	1,299	859	.6613	5,474	3,620	3,172	8,646	.42	.73	1.15
Oregon..........	1,276	882	.6912	770	532	466	1,236	.39	.64	1.04
Massachusetts...	1,271	887	.6979	4,226	2,949	2,584	6,810	.63	1.03	1.67
Ohio............	1,266	892	.7046	4,175	2,942	2,578	6,753	.38	.61	.99
Michigan........	1,260	898	.7127	12,340	8,795	7,706	20,046	1.42	2.27	3.69
Rhode Island....	1,258	900	.7154	950	680	596	1,546	.85	1.36	2.21
Maryland........	1,222	936	.7660	2,192	1,679	1,471	3,663	.72	1.09	1.82
Pennsylvania....	1,149	1,009	.8782	3,903	3.428	3,003	6,906	.33	.43	.76
Indiana.........	1,136	1,022	.8996	970	872	764	1,734	.23	.29	.51
Montana.........	1,133	1,025	.9047	205	185	162	367	.36	.45	.81
Wisconsin.......	1,091	1,067	.9780	2,922	2,858	2,504	5,425	.85	1.00	1.85
Kansas..........	1,080	1,078	.9981	956	954	836	1,792	.50	.58	1.08
Maine...........	1,055	1,103	1.0455	298	311	273	570	.35	.39	.74
Nebraska........	1,051	1,107	1.0533	307	324	283	591	.25	.27	.51
North Dakota....	1,051	1,107	1.0533	181	190	167	348	.32	.35	.67
Iowa............	1,044	1,114	1.0670	422	451	395	817	.18	.19	.37
Utah............	1,028	1,130	1.0992	276	304	266	542	.45	.47	.92
Wyoming.........	1,027	1,131	1.1013	68	75	65	134	.28	.29	.57
Colorado........	1,025	1,133	1.1054	283	313	274	557	.26	.27	.52
Idaho...........	1,008	1,150	1.1409	189	215	189	377	.41	.41	.82
Missouri........	991	1,167	1.1776	1,385	1,631	1,429	2,814	.41	.40	.81
Minnesota.......	981	1,177	1.1998	3,245	3,894	3,412	6,657	1.37	1.31	2.68
South Dakota....	966	1,192	1.2340	280	345	303	582	.57	.53	1.11
Vermont.........	958	1,200	1.2526	109	137	120	229	.39	.35	.74
Florida.........	942	1,216	1.2909	1,262	1,630	1,428	2,690	.69	.61	1.31
Texas...........	894	1,264	1.4139	2,075	2,934	2,571	4,646	.41	.33	.73
Arizona.........	891	1,267	1.4220	178	253	221	399	.38	.30	.68
New Hampshire...	891	1,267	1.4220	227	322	282	509	.63	.51	1.14
Virginia........	875	1,283	1.4663	3,253	4,769	4,179	7,432	1.49	1.16	2.64
Oklahoma........	826	1,332	1.6126	663	1,070	937	1,601	.48	.34	.82
West Virginia...	776	1,382	1.7809	496	884	775	1,271	.45	.29	.74
Louisiana.......	765	1,393	1.8209	1,203	2,191	1,919	3,123	.82	.51	1.33
New Mexico......	755	1,403	1.8583	263	489	428	692	.87	.54	1.41
Tennessee.......	747	1,411	1.8889	1,448	2,735	2,396	3,844	.85	.51	1.36
Georgia.........	710	1,448	2.0394	2,204	4,495	3,938	6,142	1.31	.73	2.05
Kentucky........	683	1,475	2.1596	2,962	6,397	5,605	8,568	2.22	1.18	3.40
North Carolina..	681	1,477	2.1689	1,794	3,890	3,408	5,202	1.02	.54	1.56
Alabama.........	660	1,498	2.2697	1,521	3,451	3,024	4,545	.56	1.11	1.67
South Carolina..	630	1,528	2.4254	1,154	2,800	2,453	3,607	1.36	.64	2.01
Arkansas........	597	1,561	2.6147	1,387	3,627	3,178	4,565	1.85	.81	2.66
Mississippi.....	527	1,631	3.0000	1,275	3,825	3,351	4,628	1.68	.64	2.32
Alaska..........	(4/)	(4/)	4/ 1.0000	87	87	77	164	1.02	1.17	2.19
Hawaii..........	(4/)	(4/)	4/ 1.0000	1,011	1,011	886	1,898	2.09	2.38	4.47
Puerto Rico.....	(4/)	(4/)	4/ 3.0000	4,893	14,680	12,863	17,756	6.27	2.39	8.66
Virgin Islands..	(4/)	(4/)	4/ 3.0000	59	175	154	212	5.92	2.25	8.17

1/ K represents 100 percent divided by $\frac{\text{State + local expenditures (\$105,562,000)}}{\text{\$100 million + State + local expenditures (\$205,562,000)}}$; in this illustration, K = 1.9474; and $1,108 x 1.9474 = $2,158.

2/ These figures are admittedly incomplete, and are not to be construed literally. The resulting allotments should be changed to the extent that each State's under-reporting exceeds or falls short of the national average.

3/ The preliminary results exceed the $100 million to be allocated because territorial income is not included in the national average per capita income, and because of differences in effort among States. The final allotments are scaled down proportionately in each case.

4/ No per capita income estimates have as yet been made for 1943 or 1945. For the purpose of this table it is assumed that the matching ratio for Alaska and Hawaii (before adjustment) should be 1:1, and for Puerto Rico and the Virgin Islands should be 3:1.

also with direct regard to the effort expended. Thus of two States with the same population and income, the State that spends the greater amount from its own funds for public health will receive correspondingly greater Federal aid. While these plans abandon the full equalization of the prescribed program, they do have the virtue of providing incentive to the several States to make greater efforts. Naturally, since the Federal share is greater in the poorest States, these plans provide a greater incentive to those States. On the other hand, if the effort expended by a wealthy State is out of proportion to that of other wealthy States, it will be correspondingly rewarded or penalized, as compared with other wealthy States.

It should be noted that the first group of alternatives (based on population and financial need) does give weight to effort expended by the State, within the limits of the aided program, in that if a State does not exert sufficient effort to match the full allotment available to it, that State will not receive its full amount of aid. In one sense, there are penalties for deficient effort, but no rewards for extra effort. The Wagner-Murray bill of 1947 would have this effect.

Open-end matching.--Open-end matching on an equalization basis of State and local expenditures provides greater incentive to the States and local units to expand and improve their public health services, for they will know in advance at what rate the Federal Government will participate in such expenditures, and know that the Federal percentage share will not be reduced (as would happen under closed allotment of the second type described above) if all States make equal improvements in their programs.

However, an open-end grant would also involve a Federal willingness to increase the amount of aid as the States and local governments spend more for public health. It is a commitment of uncertain dimensions, depending in considerable measure on the definition of public health and the interpretation of that definition. A closed grant, on the other hand, whether for $30 million or $100 million, is predictable. The basic choice is between health efficiency (doing as much public health work as States find necessary and advisable) and governmental economy (limiting Federal expenditures to predetermined sums).

Grants for Special Public Health Programs

Were Federal aid for the special programs (maternal and child health, crippled children, tuberculosis control, venereal disease control, cancer control, and mental health) of the open-end type, so that Federal aid was conditioned solely by State expenditures and the Federal reimbursement formula, it would be easy to recommend the use of equalization variable matching of the type suggested for public assistance.

If this were the case, it might be argued that the Federal interest in one or another of these special programs is great enough to justify use of a pivot-point that would make the average Federal share tend to be substantially more than the average State share. Venereal disease control is a case in point, both because of the Federal responsibility for its wartime and postwar control and because of different degrees of State interest growing out of different rates of incidence. If the special health programs could be fully separated, financially, from the general health program, no serious harm might be done by permitting such variation for a few small programs.

The same people, at the State and (especially) the local level will have to administer the special as well as the general programs. Therefore, if the Federal Government were to pay different percentages of the cost of different segments of the health program, there might be some inducement to a State to include in the program in which Federal aid would bear the highest share expenditures that were made for purposes other than the special programs. It is very difficult to allocate completely the time of personnel diverted from duties reimbursable under one aid to other duties, especially when it involves determining fractional parts of a worker's daily routine.

It may also be argued that variable Federal percentages for special health programs should be derived not from the per capita income formulation discussed in this section, but from income payments as a measure of ability, and from the special population served by the special program as a measure of "program need." Such a course is, in part, justified by the logic of chapter VII. Its weakness is that different Federal percentages would be determined by the State-to-national relationship of income per case of tuberculosis, venereal disease, cancer, mental illness, and so forth.

A profusion of different matching percentages for different programs within the same State would lead again to competition for State funds, based on fortuitous circumstances. If the pivot-point were the same for all, the differences among programs would, in total, largely cancel out. The same individual program would be at an advantage in some States and at a disadvantage in others, depending on the relative severity of the need for it from State to State. It would seem far wiser to let the State determine how to apportion its funds among programs without fortuitous pressures of this type. Furthermore, as a matter of bookkeeping and accounting, it would be well to avoid the complications of this approach.

When the amount of funds available for special programs is limited and the States are pressing against that limit, it becomes necessary to devise some allocation formula as well as a variable-matching formula if equalization is to be achieved. When special programs are designed to correct health conditions for a special part of the population, it is appropriate for an allotment formula to consider, as a measure of need, "the size of the special health problem," as the present Public Health Service Act provides. The incidence of the specific disease under attack, or the number of persons in the special group to be served, if known or measurable, should then take the place of population as the measure of need in the formula, but not in the matching or reimbursement formula, for there is nothing gained by changing from a general to a special measure of fiscal ability. Therefore an effective equalization allocation formula for a special program would be:

$$\begin{array}{l}\text{Federal} \\ \text{aid to} \\ \text{each} \\ \text{State}\end{array} = \frac{\text{Special pop. served} \times \text{Federal allotment percentage}}{\text{Summation of such calculations for all States}}\ 4/ \times \text{Federal aid (\$}$$

These allotments would be the Federal share. To insure equalization, State-local support could be provided in accordance with the State percentage, which by formula is 100 percent minus the Federal allotment percentage.

When a number of special programs are being administered by the same agency and even the same people, the determination of matching on a program-by-program basis introduces many artificial elements. Unless there are strong policy objections, State-local matching of special public health aids might well be on a uniform basis, taking all special health programs together, so as to give States more flexibility in meeting their special needs.

4/ The Children's Bureau has recently revised its formula for determining conditional apportionments of its "Fund B" grants (see pp. 44-46), using a somewhat similar formula. Live births are the legally prescribed measure of the special population served by the maternal and child health program (MCH). The number of children under 21 is used as a measure of the number of crippled children. However, the Children's Bureau does not use the Federal percentage directly, but instead uses: 100 percent - State percent. Thus instead of live births x Federal percentage the bureau uses: live births (x 100 percent) minus (live births x State percent). Also, the law suggests that additional weight should be given to rural areas, so the first (left-hand) term is given a rural weight. For MCH, then, the numerator in the equation given above becomes:

(Live births x rural weight) - (Live births x State percentage).

Because "Fund A" grants are fixed by law, this formula can only influence "Fund B" grants. Also, part of "Fund B" grants are reserved for allotment according to other procedures (e.g.: special projects to improve and extend programs). The formula is being placed into operation with respect to "nonreserve" funds over a 3-year period, starting in the fiscal year 1948, and will be in full use during the fiscal year 1950.

CHAPTER XII

EDUCATION EQUALIZATION FORMULAS

Present Federal aids for education are granted for a variety of special purposes, detailed in appendix B. The present problem of staffing the schools, and the traditional national interest in the education of all youth of our country, have again attracted interest to proposals for Federal aid to underwrite a minimum educational program in the public elementary and secondary schools, and perhaps broaden the scope of present Federal subventions to colleges and universities. Ideally, perhaps, the Federal aid should be granted for education broadly defined, thus giving the State educational agency full freedom to determine how best to use the money granted, subject only to audit controls and the influence of full publicity as to the decisions made. However, if there are special national interests which can only be served by "earmarking" Federal aid for special purposes (e.g., vocational courses, agricultural colleges, etc.), special aids may be as appropriate here as for public health.

In either case, equalization can only be achieved if the Federal aid to a State varies directly with the number of persons to be educated and inversely with the fiscal ability of the State to provide an adequate educational system from its own funds.

Present Federal education aids are administered by several Federal offices, and are criticized as encouraging duplication of administration at the State and local levels as well. Many who have studied the problem believe greater economy and greater State and local freedom of action might flow from a unified program of Federal aid to education, administered by one Federal agency to one over-all State educational agency with power to offer a full educational program within the State or, in lieu thereof, pay the schooling expenses of its advanced level student-citizens in securing elsewhere accredited courses not offered by the State.

The Federal Government is not likely to assume in the near future anything like so large a share of the cost of public education as it is now carrying of public assistance and is likely to be carrying in the field of public health during the next few years. This comment is necessary to place in proper perspective the problem of devising a formula for aid to education. One cannot expect that much attention would be given to a suggestion that the magnitude of Federal aid to education should, at this time, be relatively comparable to that for public assistance or for public health, as a proportion of the total expenditures. Nevertheless, there appears to be substantial support for Federal aid to education, on an equalization basis, so as to reduce the inequalities in educational opportunity, or to "place a floor under educational services."

A variety of formulas can be and have been devised to secure a greater or lesser degree of equalization with a given amount of Federal aid. Most of the recent proposals for Federal aid seem to suggest grants of about $300 million annually. This amount is too small compared with

State-local expenditures of almost $2.5 billion annually [1] to achieve more than a modest amount of equalization, unless practically all the funds are given to a few States to raise the level most where fiscal ability is lowest and need greatest.

Open-end Federal Aid

Most Federal aid proposals for education are for a specified and limited sum of money. Only one bill suggests sufficient Federal money to make reasonably full equalization a possible goal and then only after 10 years of limited funds.[2] Yet there is no theoretical reason why a formula of Federal aid could not be designed that would operate within an open-end framework, such as the matching provisions of public assistance now provide. Furthermore, an open-end formula could be designed that would yield substantial amounts of equalization with relatively small Federal funds.

For example, variable Federal matching (reimbursement) percentages could be computed according to the ratio of State to national income per child of school age or per capita, based on a State percentage pivot-point high enough to ensure that State support would continue to provide the bulk of the funds, as follows:

$$\frac{\text{The State percentage}}{\text{90 percent}} = \frac{\text{State income per child of school age}}{\text{National income per child of school age}}$$

The Federal percentage of a State's educational program would be 100 percent minus the State percent. Table 28 illustrates the Federal percentages resulting from such a proposal, both when computed on the basis of income per child of school age, and when computed by the more usual method of income per capita (columns 3 and 4). For some States the differences between the two methods are rather sharp, most educators would prefer to measure need more precisely than does total population, used in deriving income per capita. Of course the other adjustments discussed in chapter VIII could also enter into these calculations, but, for simplicity's sake, it is assumed that the number of children of school age adequately represents educational need.

The intent of the following discussion is to show that the Federal education aid could go on an open-end basis under variable-percentage-matching grants, and still keep Federal costs within limits approximating those recommended by most legislative sponsors. The reason for placing this suggestion first is that the proposal has been largely neglected. E. L. Lindman [3] is one of the few who have explored this alternative.

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[1] Current expenditures on public elementary and secondary education only.
[2] The Murray-Morse-Pepper bill, S.2499, 79th Congress, 2d session. 1946.
[3] See footnote 1 in chapter VII.

Open-end matching has certain advantages. The Federal Government is not directly involved, under such a procedure, in seeming to measure the minimum content of each State's educational program. It does not have to use "floor provisions" in an attempt to ensure that States with low levels of educational program make some minimum effort. Instead, the matching provides a direct incentive to increased State effort, because as expenditures are increased, Federal aid is increased. It penalizes substandard effort automatically. Competition among States for larger shares of limited Federal expenditures is eliminated, since the amount of Federal aid is dependent on the State's own effort.

The incentive is, of course, greatest in the States that would receive the high Federal percentages. These are the States in which the education program, even with extremely great State tax effort, will continue to be inadequate unless there is Federal aid. The incentive and the penalty are relatively much smaller in the high-income States.

In fact, table 28 shows that perhaps a dozen high-income States would not get any Federal aid under the limits of this proposal (unless an arbitrary minimum grant is provided). Theoretically, this condition is fully justified by the high degree of equalization possible under this proposal with small amounts of Federal aid. However, if every State must have some Federal aid, a minimum Federal percentage of aid could be provided (e.g., 3, 5, or 10 percent), but this will increase Federal costs.

Table 28 was prepared to demonstrate the operations that result from this type of formula, assuming that the "average State" put up 90 percent of the cost of its program, and that no State put up more than 95 percent (this provides a 5 percent minimum Federal aid). For sake of illustration, State-local current expenditures for public elementary and secondary schools are used for the school year 1943-44 (column 5). Given the Federal percentages resulting from income per child and the 90 percent pivot-point, Federal aid might have cost $626 million compared with the $2.3 billion actually expended from State-local funds. The 5-percent minimum Federal aid would have been responsible for $62 million of the Federal cost. Total Federal aid would be somewhat less using income per capita (column 12).

Mr. Lindman's proposal for partial equalization introduces the "equalization fraction" (E) discussed in chapter VII. The matching ratio (M) of Federal to State money would be:

$$M = R \frac{P_n}{P_{ab}} - E.$$

He illustrates the effect of various values of R (the support level), and E (the equalization fraction), in a manner similar to that in charts 10-13. Given a knowledge of the amount of State and local expenditures, and of the amount of Federal aid available, he explains that values of R and E can be determined that will spend the funds so as to secure the desired amount of equalization. Roughly, if all States are aided, the value of (R-E) should equal the ratio of Federal to State funds. The closer the

Table 28.—Illustration of proposal for open-end aid to education with equalization matching using 10 percent Federal 1/ aid as pivot-point

States ranked by 1943-45 per capita income	Income per school age child (5-17 years), 1943-45	Federal aid percentages		State-local current expenditures for public education, 1943-44 [In thousands]	Estimates using income per child			Average current State-local expenditures per school age child	Average total expenditures per school age child after Federal aid	Estimates using income per capita	
		Based on income per child (5-17 years)	Based on per capita income		Rate at which Federal aid would match State money	Hypothetical Federal aid (col. 5 x col. 6) [In thousands]	Total current expenditures after Federal aid (col. 5 + col. 7)			Rate at which Federal aid would match State money	Hypothetical Federal aid (col. 5 x col. 11) [In thousands]
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Total, 49 States	$5,089	---	---	$2,293,337	---	$626,287	$2,919,624	$79.27	$100.92	---	$469,628
Total, 34 States	---	10	10	1,109,899	---	564,038	1,673,937	63.09	95.15	---	407,379
Mississippi	1,896	66	57	18,796	1.9412	36,487	55,283	31.59	92.91	1.3256	24,916
Arkansas	2,213	61	52	16,779	1.5641	26,244	43,023	34.38	88.16	1.0833	18,177
South Carolina	2,230	61	49	21,194	1.5641	33,150	54,344	39.03	100.08	.9608	20,363
Alabama	2,373	58	46	28,565	1.3810	39,448	68,013	36.16	86.09	.8519	24,335
North Carolina	2,483	56	45	47,465	1.2727	60,409	107,874	48.58	110.41	.8182	38,836
Kentucky	2,565	55	45	31,198	1.2222	38,130	69,328	44.32	98.48	.8182	25,526
Georgia	2,754	51	42	30,473	1.0408	31,716	62,189	36.94	75.38	.7241	22,065
Tennessee	2,935	48	39	30,599	.9231	28,246	58,845	41.41	79.63	.6393	19,562
New Mexico	2,645	53	39	10,541	1.1277	11,887	22,428	69.35	147.55	.6393	6,739
Louisiana	3,134	45	38	32,713	.8182	26,766	59,479	53.54	97.35	.6129	20,050
West Virginia	2,699	52	37	33,528	1.0833	36,321	69,849	67.19	139.98	.5873	19,691
Oklahoma	3,228	43	33	34,246	.7544	25,835	60,081	64.01	112.30	.4925	16,866
Virginia	3,801	33	29	34,503	.4925	16,993	51,496	48.73	72.73	.4085	14,094
New Hampshire	4,184	26	28	6,894	.3514	2,423	9,317	70.35	95.07	.3889	2,681
Arizona	3,905	31	28	10,472	.4493	4,705	15,177	70.76	102.55	.3889	4,073
Texas	3,903	31	27	88,683	.4493	39,845	128,528	56.31	81.61	.3699	32,804
Florida	4,980	12	23	25,915	.1364	3,535	29,450	57.33	65.15	.2987	7,741
Vermont	4,053	28	22	5,354	.3889	2,082	7,436	71.39	99.15	.2821	1,510
South Dakota	3,956	30	22	12,763	.4286	5,470	18,233	93.16	133.09	.2821	3,600
Minnesota	4,468	21	20	52,143	.2658	13,860	66,003	93.78	118.75	.2500	13,036
Missouri	4,795	15	20	53,379	.1765	9,421	62,800	71.08	83.62	.2500	13,345
Idaho	4,200	26	18	9,267	.3514	3,256	12,523	77.22	104.36	.2195	2,034
Colorado	4,767	16	17	21,120	.1905	4,023	25,143	86.20	102.62	.2048	4,325
Wyoming	4,643	18	17	5,982	.2195	1,313	7,295	106.82	130.27	.2048	1,225
Utah	4,083	28	16	13,694	.3889	5,326	19,020	87.22	121.15	.1905	2,609
Iowa	4,758	16	15	44,421	.1905	8,462	52,883	88.66	105.55	.1765	7,840
North Dakota	3,848	32	15	11,944	.4706	5,621	17,565	82.37	121.14	.1765	2,108
Nebraska	4,733	16	15	22,430	.1905	4,273	26,703	83.07	98.90	.1765	3,959
Maine	4,484	21	14	11,668	.2658	3,101	14,769	62.06	78.56	.1628	1,900
Kansas	5,108	10	12	32,409	.1111	3,601	36,010	87.12	96.80	.1364	4,421
Wisconsin	4,927	13	11	55,096	.1494	8,231	63,327	83.48	95.95	.1236	6,810
Montana	4,881	14	8	12,437	.1628	2,025	14,462	114.10	132.68	.0870	1,082
Indiana	5,332	6	8	63,313	.0638	4,039	67,352	86.85	92.39	.0870	5,508
Pennsylvania	5,147	9	7	179,915	.0989	17,794	197,709	86.41	94.96	.0753	13,548
Maryland	6,117	---	1	2/ 27,185	---	---	2/ 27,212	2/ 63.57	2/ 63.73	.0010	2/ 27
	Effect of 5 percent minimum Federal aid										
Total, 15 States	---	---	---	1,183,436	---	62,249	1,245,685	104.38	109.87	---	62,249
Maryland	6,117	5	5	27,185	.0526	1,430	28,615	63.67	67.01	.0526	1,430
Rhode Island	6,514	5	5	12,055	.0526	634	12,689	83.72	88.12	.0526	634
Michigan	5,736	5	5	103,240	.0526	5,430	108,670	86.32	90.86	.0526	5,430
Ohio	6,145	5	5	124,932	.0526	6,571	131,503	88.10	92.74	.0526	6,571
Massachusetts	6,457	5	5	83,376	.0526	4,386	87,762	100.21	105.48	.0526	4,386
Oregon	6,947	5	5	22,177	.0526	1,167	23,344	98.56	103.75	.0526	1,167
Illinois	6,683	5	5	150,281	.0526	7,905	158,186	99.92	105.18	.0526	7,905
Nevada	7,370	5	5	2,904	.0526	153	3,057	107.56	113.22	.0526	153
District of Columbia	8,312	5	5	12,574	.0526	661	13,235	87.32	91.91	.0526	661
New Jersey	7,112	5	5	99,896	.0526	5,255	105,151	124.09	130.62	.0526	5,255
Delaware	6,842	5	5	4,699	.0526	247	4,946	82.44	86.77	.0526	247
Washington	8,192	5	5	40,932	.0526	2,153	43,085	112.45	118.37	.0526	2,153
California	8,809	5	5	172,604	.0526	9,079	181,683	118.87	125.13	.0526	9,079
Connecticut	7,751	5	5	32,738	.0526	1,722	34,460	96.01	101.06	.0526	1,722
New York	7,866	5	5	293,843	.0526	15,456	309,299	122.33	128.77	.0526	15,456

1/ Federal percentage here = 100 percent - 90 percent X $\frac{\text{State income per school child (or per capita)}}{\text{National income per school child (or per capita)}}$.

2/ These amounts are not included in the sub-total for 34 States because Maryland is benefited by the 5 percent minimum and therefore appears in the other sub-total.

value of E approaches + 1 from 0, the greater the degree of equalization and the larger the value of R needed to expend the same amount of Federal funds.

Closed or Limited Amounts of Federal Aid

Because most formulas for Federal education aid in recent years have dealt with methods of allocating a specific amount of funds, rather than with variable matching, they have taken a variety of forms, with greater or lesser degrees of equalization, depending on decisions as to the number of States to be aided, the amount of funds to be granted, and the degree of equalization desired by the sponsors.

Formulas reasonably consistent with those recommended in chapter XI for allotment of public health grants-in-aid were contained in at least two bills of the 79th Congress: the Mead-Aiken bill (S. 2207) and the Murray-Morse-Pepper bill (S. 2499). Another proposal which comes at the problem somwhat differently, but results in considerable equalization, has been introduced by Senator Taft.4/

The Mead-Aiken bill, S. 2207, would determine each State's share of a maximum of $300 million of Federal aid in accordance with the following calculation for each State:

$$\begin{array}{c}\text{2 percent of State}\\ \text{income payments}\end{array} \times \frac{\text{National income per child} - \text{State income per child}}{\text{State income per child}}$$

The amount of each State's share would be prorated on the basis of the indexes thus derived. If Federal aid were sufficient, these calculations would bear a resemblance to what would be the Federal aid to each State if each State made uniform effort (e.g., 2 percent of income payments) 5/ and that effort were matched under equalization percentages pivoting on 100 percent State support in all States where income per child was equal to or greater than the national average. The bill would have given a minimum amount of Federal aid to every State by fixing 0.04 as the minimum value for the second term in the equation. The bill also provided that if the effort of a State fell below the national average effort, the State's share by the specified formula would be reduced proportionately, thus penalizing States with fiscal effort below the national average.

The Murray-Morse-Pepper bill (S. 2499), introduced in the closing days of the 79th Congress dealt with a 10-year comprehensive program of

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4/ For himself and Senators Thomas of Utah, Hill, Ellender, Smith, Cooper, Chavez, and Tobey, introduced January 31, 1947. S. 472 in the 80th Congress, S. 181 as reported in the 79th Congress, S. Rept. No. 1497, June 13, 1946.

5/ The bill used 2 percent of income payments because this percentage represents a uniform, and probably minimum, effort. The resulting allotments would not have been different, however, if another percentage had been used.

assistance to education. It included grants for basic educational programs and services, as well as for scholarships, fellowships, plant facilities, and camping programs.

Only title I, for basic services, is of interest at this point. Grants under this title would grow from $500 million in the first year to $1 billion in the tenth year: by a $100 million increment in the first year and $50 million annual increments thereafter. The money would be prorated among States in a manner somewhat similar to that of the Mead-Aiken bill, as follows:

$$\text{State income payments} \times \frac{2 \times \text{national income per child} - \text{State income per child}}{\text{State income per child}}$$

In this case, given sufficient funds, the calculations resemble those that would flow from matching uniform State fiscal effort to support schools with Federal funds based on equalization percentages pivoting on 50 percent State support in the State whose income per child equaled the national average.

To assure that all States received some Federal aid, the bill further provided minimum grants per child, starting at $5 per child in the first year and rising to $10 per child in the tenth year.

The Murray-Morse-Pepper bill might have provided sufficient funds to achieve the equalization implicit in its formula in title I, if, after the tenth year, funds were appropriated roughly equal to the amount of State and local funds spent for the same purposes. So long as the amounts were less than that, it would provide only partial equalization, notwithstanding the equalization possibilities of the formula.

The Taft-Thomas-Hill bill,[6] (S. 472), combines measures of need and fiscal ability in a very direct fashion to determine Federal aid. The bill as originally introduced was similar to S. 181 as reported out of committee in the 79th Congress. S. 472 was reported out by the Senate Committee on Education and Public Welfare on July 3, 1947, with several significant amendments.

The original bill undertook to assure a national minimum of $40 per pupil in every school district in every State that would draw Federal aid. The amount of Federal aid due each State would have been the "national minimum" ($40 per child age 5 to 17) less 1.1 percent of a 5-year average of annual income payments in each State.

The original percentage chosen (1.1) was determined as being approximately the average effort that would be required in the Nation as a whole to raise the equivalent of $40 per pupil. Therefore, it operated

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6/ Original sponsors of S. 181 of 79th Congress, as amended; see footnote 4, above.

Table 29.--Comparative cost of Federal aid to education under the formula in original S.472 1/ as estimated in 1946 2/ and in 1947,3/ with different data, by State

States ranked by 1943-45 per capita income	Estimated cost of program if State spent $40 per child (5-17 years)-- (in thousands)		Estimated amount of State-local contributions at standard effort rate of 1.1 percent of income payments (in thousands)		Amount needed to reach $40 after 1.1 percent of average income is devoted to education (in thousands)		Penalty for less than 2.5 percent effort 4/		Federal aid to each State after penalty is applied-- (in thousands)	
	1946 estimate	1947 estimate	1946 estimate	1947 estimate	1946 estimate	1947 estimate	1946 estimate	1947 estimate	1946 estimate	1947 estimate
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
Total	$1,158,248	$1,157,200	$1,084,325	$1,428,284	$227,139	$123,303	---	---	$210,689	$106,328
High-income group	573,481	570,320	725,461	939,400	1,236	---	---	---	1,101	---
New York	96,522	96,080	150,843	186,692	---	---	---	---	---	---
Connecticut	13,834	13,640	20,933	26,609	---	---	---	---	---	---
California	58,295	58,080	85,668	120,164	---	---	---	---	---	---
Washington	14,666	14,560	18,865	27,764	---	---	---	---	---	---
Delaware	2,270	2,280	3,102	3,883	---	---	---	---	---	---
New Jersey	32,571	32,200	44,308	56,562	---	---	---	---	---	---
District of Columbia	5,712	5,760	9,735	11,902	---	---	---	---	---	---
Nevada	1,059	1,080	1,496	1,980	---	---	---	---	---	---
Illinois	60,339	60,160	77,627	99,176	---	---	---	---	---	---
Oregon	9,123	9,000	10,461	14,718	---	---	---	---	---	---
Massachusetts	33,602	33,280	43,692	53,812	---	---	---	---	---	---
Ohio	57,016	56,720	64,867	85,184	---	---	---	---	---	---
Michigan	47,980	47,840	50,622	66,627	---	---	---	---	---	---
Rhode Island	5,835	5,760	7,414	9,416	---	---	---	---	---	---
Maryland	17,153	17,080	19,063	25,476	---	---	---	---	---	---
Pennsylvania	83,884	83,280	84,381	106,337	---	---	---	---	---	---
Indiana	29,279	29,160	28,116	37,763	1,163	---	88.4	---	1,028	---
Montana	4,341	4,360	4,268	5,335	73	---	---	---	73	---
Middle-income group	166,951	166,320	141,878	188,100	25,073	928	---	---	24,007	928
Wisconsin	26,490	26,400	23,606	31,548	2,884	---	93.6	---	2,699	---
Kansas	14,985	14,880	12,452	17,820	2,533	---	---	---	2,533	---
Maine	7,544	7,520	6,270	8,140	1,274	---	84.4	---	1,075	---
Nebraska	10,864	10,800	8,635	12,023	2,229	---	---	---	2,229	---
North Dakota	5,852	5,800	3,773	5,357	2,079	443	---	---	2,079	443
Iowa	20,148	20,040	18,117	23,397	2,031	---	96.4	---	1,958	---
Utah	6,255	6,280	4,411	6,083	1,844	197	---	---	1,844	197
Wyoming	2,238	2,240	2,035	2,574	203	---	---	---	203	---
Colorado	9,789	9,800	8,679	11,374	1,110	---	96.8	---	1,074	---
Idaho	4,805	4,800	3,531	4,829	1,274	---	---	---	1,274	---
Missouri	30,121	30,040	27,258	35,343	2,863	---	80.0	---	2,290	---
Minnesota	22,336	22,240	19,371	24,420	2,965	---	---	---	2,965	---
South Dakota	5,524	5,480	3,740	5,192	1,784	288	---	---	1,784	288
Low-income group	417,816	420,560	216,986	300,784	200,830	122,303	---	---	180,946	100,400
Vermont	2,992	3,000	2,464	3,036	528	---	88.8	---	469	---
Florida	18,191	18,080	13,882	20,416	4,309	---	72.4	---	3,120	---
Texas	62,854	63,000	41,096	57,420	21,758	5,580	91.6	78.8	19,930	4,397
Arizona	5,934	5,920	3,883	5,401	2,051	519	---	92.4	2,051	480
New Hampshire	3,950	3,920	3,443	4,147	507	---	82.8	---	420	---
Virginia	28,219	28,320	19,008	26,169	9,211	2,151	68.0	64.8	6,263	1,394
Oklahoma	21,463	21,400	12,001	16,368	9,462	5,032	---	96.8	9,462	4,871
West Virginia	19,682	19,960	10,307	13,255	9,375	6,705	---	---	9,375	6,705
Louisiana	24,388	24,440	13,145	18,062	11,243	6,378	92.4	84.4	10,389	5,383
New Mexico	5,978	6,080	2,750	3,795	3,228	2,285	---	---	3,229	2,285
Tennessee	29,434	29,560	14,201	20,317	15,233	9,243	86.4	76.0	13,161	7,025
Georgia	32,498	33,000	15,092	21,318	17,406	11,682	82.0	72.0	14,273	8,411
Kentucky	28,031	28,160	12,650	17,116	15,381	11,044	86.8	85.2	13,351	9,409
North Carolina	38,727	39,080	16,995	23,254	21,732	15,826	98.8	88.4	21,471	13,990
Alabama	31,256	31,600	12,408	17,776	18,848	13,824	90.8	71.6	17,114	9,898
South Carolina	21,362	21,720	8,382	11,638	12,980	10,082	96.0	88.0	12,461	8,872
Arkansas	19,372	19,520	7,656	10,527	11,716	8,993	81.6	76.8	9,560	6,907
Mississippi	23,485	23,800	7,623	10,769	15,862	13,031	93.6	79.6	14,847	10,373
Territories	---	---	---	---	---	---	---	---	5/ 4,635	6/ 5,000

1/ Using the terms of the bill as introduced (same as S.181-79th Congress).
2/ Columns (2), (4), (6), and (8) from The Journal of the National Education Association, May 1946, p. 236, which uses 1943 population and 1939-43 income payments, and 1942-43 current State-local expenditure data.
3/ Columns (3), (5), (7), and (9) based on 1944 population, 1941-45 average income payments and adjusted State-local current education expenditures as shown in Senate Report 425, 80th Congress.
4/ Percentage of tentative grant actually allowed, equal to State's percentage of minimum effort standard.
5/ NEA estimate.
6/ 2 percent of appropriation, as provided in the bill.

to exclude from Federal aid most of the States with incomes above average. If this were all the formula required, it would assure equalization up to $40 per pupil, but no more. The bill provided further, however, that each State must spend at least 2.2 percent of its income payments on current expenditures for education (after 1952), in order to get Federal aid.

The formula is thus automatically a form of partial equalization. It might be said to equalize the results of one-half of the State's effort. The other half (the additional 1.1 percent) would provide substantially larger amounts per pupil in the States near the national average than in the poorest States. Furthermore, the bill provided that if a State spends less than 2.5 percent (but more than 2.2 percent) of its income payments, its aid will be reduced proportionately. Thus the degree of equalization was still further moderated. The operation of this formula and the penalty provision is shown in table 29.

S. 472, as reported out of committee, made several strategic changes in the computation of the State apportionments. The "national minimum" to be achieved was raised from $40 per child to $45. At the same time, the percentage of income payments used as a measure of State fiscal ability was lowered from 1.1 to 1 percent. Furthermore, after the first few years of operation of the bill, States must maintain effort equal to 2.0 percent of income payments in order to be eligible for any aid. The penalty, applied for effort less than 2.5 percent, was retained. The bill also added a minimum grant of $5 per child. The current operation of this formula is shown in table 29A.

Placing in the law a fixed percentage of State and local effort and a fixed dollar amount per pupil, runs the risk that if inflation continues, both as to prices and incomes, costs will rise so that the amounts per pupil will be less and less insufficient, and at the same time the formula will operate to reduce the absolute amount of Federal aid. The standard effort originally contemplated of 1.1 percent of income payments will yield $40 per pupil in an increasing number of States, and the deficiencies will shrink in the remaining aided States. Illustration of this weakness is shown in table 29. A comparison of the allocations under the same formula using data for two different sets of years indicates that, with the rise in income in the past several years, the formula as originally written would operate to give less and less Federal aid.

Columns 2, 4, and 6 show the operation of the formula as computed by the National Education Association using income data for the years 1939-43, and 1943 population.

Columns 3, 5, and 7 show the same steps using the most recent income and population estimates, as shown by the Senate Committee on Education and Labor. The difference between the amounts of Federal aid due under both computations is striking. By the earlier computation, before application of the penalty, Federal aid due the 48 States and the District of Columbia amounted to $227 million; based on later income data, the total would be only $123 million under the identical formula. Furthermore, as State-local current expenditures for elementary and secondary schools did not

Table 29A.--Comparison of Federal aid to education under S.472 as reported, and under alternative terms, by State 1/

States ranked by 1943-45 per capita income	Difference between $45 per child and 1 percent of income payments (000)	Difference between $70 per child and 2 percent of income payments (000)	Penalty for effort less than 2.5 percent of income payments 2/	Federal aid after penalty: S.472, as reported (000)	Federal aid after penalty: S.472 if amended to $70 per child and 2 percent effort (000)	Federal aid per child: S.472	Federal aid per child: Suggested amendment
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Total.........	$215,855	$196,090	---	$254,200	$261,176	$8.79	$9.03
High-income group....	55	---	---	71,290	71,290	5.00	5.00
New York..........	---	---	---	12,010	12,010	5.00	5.00
Connecticut.......	---	---	---	1,705	1,705	5.00	5.00
California........	---	---	---	7,260	7,260	5.00	5.00
Washington........	---	---	---	1,820	1,820	5.00	5.00
Delaware..........	---	---	---	285	285	5.00	5.00
New Jersey........	---	---	---	4,025	4,025	5.00	5.00
Dist. of Col......	---	---	---	720	720	5.00	5.00
Nevada............	---	---	---	135	135	5.00	5.00
Illinois..........	---	---	---	7,520	7,520	5.00	5.00
Oregon............	---	---	---	1,125	1,125	5.00	5.00
Massachusetts.....	---	---	---	4,160	4,160	5.00	5.00
Ohio..............	---	---	---	7,090	7,090	5.00	5.00
Michigan..........	---	---	---	5,980	5,980	5.00	5.00
Rhode Island......	---	---	---	720	720	5.00	5.00
Maryland..........	---	---	---	2,135	2,135	5.00	5.00
Pennsylvania......	---	---	---	10,410	10,410	5.00	5.00
Indiana...........	---	---	---	3,645	3,645	5.00	5.00
Montana...........	55	---	---	545	545	5.00	5.00
Middle-income group..	16,110	560	---	22,863	20,790	5.50	5.00
Wisconsin.........	1,020	---	84.0	3,300	3,300	5.00	5.00
Kansas............	540	---	87.2	1,860	1,860	5.00	5.00
Maine.............	1,060	---	68.8	940	940	5.00	5.00
Nebraska..........	1,220	---	92.8	1,350	1,350	5.00	5.00
North Dakota......	1,655	410	---	1,655	725	11.41	5.00
Iowa..............	1,275	---	89.6	2,505	2,505	5.00	5.00
Utah..............	1,535	---	---	1,535	785	9.78	5.00
Wyoming...........	180	---	---	280	280	5.00	5.00
Colorado..........	685	---	84.8	1,225	1,225	5.00	5.00
Idaho.............	1,010	---	94.4	953	600	7.94	5.00
Missouri..........	1,665	---	69.6	3,755	3,755	5.00	5.00
Minnesota.........	2,820	---	---	2,820	2,780	5.07	5.00
South Dakota......	1,445	150	---	685	685	5.00	5.00
Low-income group.....	199,690	195,530	---	160,047	169,096	15.22	16.08
Vermont...........	615	---	83.2	512	375	6.83	5.00
Florida...........	1,780	---	---	2,260	2,260	5.00	5.00
Texas.............	18,675	5,850	78.8	14,716	7,875	9.34	5.00
Arizona...........	1,750	540	92.4	1,617	740	10.92	5.00
New Hampshire.....	640	---	79.2	507	490	5.17	5.00
Virginia..........	8,070	1,980	64.8	5,229	3,540	7.38	5.00
Oklahoma..........	9,195	7,690	96.8	5,029	7,444	9.40	13.91
West Virginia.....	10,405	10,830	---	10,405	10,495	20.85	21.03
Louisiana.........	11,075	9,930	84.4	9,347	8,381	15.30	13.72
New Mexico........	3,390	3,740	---	3,390	3,740	22.30	24.60
Tennessee.........	14,785	14,790	76.0	11,237	11,240	15.20	15.20
Georgia...........	17,745	18,990	72.0	12,776	13,673	15.49	16.57
Kentucky..........	16,120	18,160	85.2	13,734	15,472	19.51	21.98
North Carolina....	22,825	26,110	88.4	20,177	23,081	20.65	23.62
Alabama...........	19,390	22,980	71.6	13,883	16,454	17.57	20.83
South Carolina....	13,855	16,850	88.0	12,192	14,828	22.45	27.31
Arkansas..........	12,390	15,020	76.8	9,516	11,440	19.50	23.44
Mississippi.......	16,985	22,070	79.6	13,520	17,568	22.72	29.53

1/ Based on 1944 population (5-17), 1941-45 average income payments, and adjusted State-local current education expenditures as shown in Senate Report 425, 80th Congress.

2/ Percentage of tentative grant actually allowed, equal to State percentage of minimum effort standard.

increase in proportion to the increase in income payments, the penalty to be applied under the more recent calculation is greater. Thus Federal aid would be cut from $211 million, by the earlier calculation, down to only $106 million. The bill, however, contemplated Federal aid in the amount of $250 million.

The revised bill, by changing the amount to $45 per child and the effort rate to 1 percent, manages to raise the amount of aid to $216 million before using the minimum, and to $254 million after inclusion of $5 per child minimum. The same basic formula would yield more equalization with little additional expenditure of Federal aid if the values of the first two constants were both raised simultaneously, but the amount per child by a smaller fraction than the State effort assumed in the initial calculation. Table 29A illustrates that if the amount per child were raised to $70 per year, and if the effort used in the calculation were increased to 2 percent of income payments, the resulting Federal aid might total to approximately the same amounts, but that more of the aid would be going to the States most in need of aid, either because of large proportions of children, or low income, or both.

Additional increments of Federal aid, given this type of amendment, would secure substantially greater equalization than will the other, because it takes greater consideration of the State's true effort in support of education. One could not expect that every local school district would have exactly the same amount of funds per pupil as every other district, nor is that degree of equality desirable. Therefore if a formulation such as this were used, one might add that as a condition of receipt of Federal aid, each school district should have available a minimum amount per pupil somewhat less than the $70 used for sake of computation, but substantially above the $45 now suggested.

The latter modification of the formula would approach the philosophy of full equalization of this paper. It need not require more State and local money than the formula in S. 472 now requires,[7] though it may necessitate some additional redistribution among local school districts so as to achieve a higher degree of intrastate equalization--but that is one of the purposes of Federal aid for education.

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[7] Depending on the amount per child aged 5-17 fixed in such a modification.

It is possible, of course, that prices and incomes will shrink and that the amount of Federal aid will grow. But the lag provided by the 5-year averaging of income payments will prevent the formula from immediately demonstrating its potential "counter-cyclical" capacities. In either case, States may within a few years be appealing for changes in the formula. The constants chosen may be valid for the current year's experience, but less valid in later years.

The Aiken bill (S. 199 of the 80th Congress) is a more direct approach to securing a national minimum per pupil, but it takes no direct account of differences in fiscal ability. In the first year, each State would get $20 per pupil from Federal aid provided it were spending (in each local school administrative unit) not less than $50 per pupil. The amounts are increased by $10 a year until, in 1952, the Federal aid would be $60 per pupil and the total amount per pupil $90. After 1953, each local school administrative unit would have to spend $100 per pupil. The State-local effort required is less than every State but, possibly, one is already spending; the provision that the minimum amount must be spent in each local unit may require some redistribution of State funds, however.

This bill would cost, its author estimates, at least $392 million in the first year and perhaps as much as $1.2 billion each year after 1952. The uniform Federal share in each State has an equalizing tendency, of course, but it does not directly compensate for inequities resulting from the differences in State fiscal ability. The absolute range among States in amount spent per pupil might be as great after the aid as before, but because the whole level would be substantially raised, the relative range would be reduced. If cost is no consideration, this may appear to some as a popular way to underwrite a national minimum in education, and secure a relative reduction in the range of inequalities that would flow from such a formula.

Other bills, for example, S. 81 and H.R. 1762 in the 80th Congress, also provide grants on a per pupil basis.

The McCarran bill, S. 170, contains a fractional plan to give Federal help toward teachers' salaries. It would offer, in effect, 25 percent of the first $1,000 per annum per teacher, 15 percent of the next $1,000, 10 percent of the third $1,000 of the teacher's salary, and 5 percent of salary payments between $3,000 and $4,000 per year.

Clearly the bill intends that the national interest shall be strongest in raising low salaries and less in raising intermediate salaries, and shall have no effect on payments greater than $4,000 per year. During the first year $600 million is authorized and thereafter a sum sufficient.

In conclusion 8/--Because the amount of any Federal grants-in-aid to education will in all probability be limited during the early years, it would seem best to use an allocation formula that would secure the highest degree of equalization compatible both with the amount of funds involved and with the necessity (if there really be one) of including a majority if not all States in the program.

8/ For an excellent statistical appraisal of the alternative formulas for aid to education, see "Grant-in-Aid Apportionment Formulas," by Francis G. Cornell, in the Journal of the American Statistical Association, March 1947, Vol. 42, pp. 92-104.

CHAPTER XIII

PUBLIC CONSTRUCTION FEDERAL AIDS

Grants-in-aid for public construction have been made for almost every major federally-aided function, but notably for transportation, health facilities, conservation and development of natural resources and, on occasion, for education and economic security. In one sense, given proper timing of the construction, all public construction can be used to serve the interests of economic security.

Every major form of transportation has had, at some time and in some way, Federal support. Only in the case of highways and airports are there now Federal-State cooperative programs. Federal policy and practice in each of its transportation programs--whether for highways, rivers, canals, ports, airports, or railways and terminals--might well be coordinated to yield maximum social utility, and, as closely as possible, integrated with State-local policies. A sound criterion of aids, subsidies, and regulatory decisions in these fields is that they should encourage the most economic use of each form of transportation.

Public construction has helped to conserve and develop the Nation's natural resources, especially its forests, rivers, and farms. Because of the multiple purposes governments seek to serve with respect to natural resources, and the many interests involved at the Federal, State, and local levels, grants can be only one of the tools used in this program. They may be especially useful, for example, in stimulating State and local action and in redressing any fiscal inequities between levels of government that arise out of other actions taken.

The national interest in certain forms of public construction justifies such construction without regard to other considerations of economic security. If once again economic considerations make necessary the initiation of Federal aid for public works generally, such a program will need to be rather flexible, expanding as unemployment mounts and contracting when the labor market becomes tight. The goal of full employment without inflation requires flexibility in operations and considerable latitude for Federal direction over initiation of construction, speed of completion, and termination of such expenditure. Therefore, Federal grants for projects that lie in the municipal field may have to be funneled directly to the local governments, unless the States build administrative machinery adequate to this task. Long-run considerations of economy will be served if priority is given the most productive and most socially necessary types of projects proposed and ready for action at any given time.

This chapter is especially concerned with Federal grants for construction as part of a Federal health and education program and as part of a program of economic security. Detailed analysis of regular grants in support of transportation facilities and of conservation and development of natural resources are beyond the scope of this study. However, many of the comments made below may also be pertinent to such aids.

Health and Education Construction Grants

During the depression of the 1930's, Federal emergency relief moneys were used to finance or help finance the construction of a wide range of public works, including such community facilities as schools, libraries, hospitals, and health centers. These were not grants-in-aid in the sense in which that term is used here. They were emergency subventions or loans to local units of governments and to States, largely on an individual project application basis. Each project and situation was reviewed to provide a basis for administrative determination as to the need for the facility, as well as to the capacity of the local or State unit to finance all or its part of the cost.

During the war, the community facilities acts (Lanham Acts) [1] provided similar help to war-affected communities. Again, the local units submitted applications and had to make a showing of their need for the facilities and their inability to provide the facilities from their own resources. The legislation was of an emergency, year-to-year character. It undoubtedly helped many distressed communities through difficult situations with respect to housing, schools, hospitals, and other public works. Part of the funds were also available to provide assistance in financing the operation of these facilities when that too was a problem.

The wartime economy could not permit any construction that did not contribute to (or that detracted from) the war effort. As a result, the normal maintenance, to say nothing of replacement, of many public structures was allowed to lag. Backlogs of public construction were deliberately permitted to accumulate in order to provide a cushion for employment purposes should the economy fail to provide adequate employment opportunities after the war. As a result, many States and their local units are sorely in need of new hospitals, new health centers, new facilities for the influx of ex-servicemen into educational institutions, and the like.

In recognition of the need for hospitals and health centers, the Seventy-ninth Congress enacted the Hill-Burton bill, sponsored also by Senator Taft after Senator Burton was appointed to the Supreme Court. This bill, S. 191, became the Hospital Survey and Construction Act, Public Law 725, on August 13, 1946. As worked out by the Senate Committee on Education and Labor, the bill contained an objective formula that would have provided a substantial amount of equalization.

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[1] 42 U.S.C. 1531-34, 1541, and 1562; 54 Stat. 1125, Public Law 849, 76th Congress, and subsequent acts.

The allocation procedure was devised to give weight not only to differences in the fiscal abilities of the several States to provide adequate facilities, but also to differences in the size of the backlog of hospital construction needed among the several States. The testimony of the Public Health Service as to the "deficiency" in hospital beds showed that the deficiency was largest, as one might expect, in the lowest-income States, and smallest in the high-income States.

Inasmuch as the bill provided only a limited amount of funds for a limited period of years, the committee desired to channel more funds to the States with the greater deficiencies, in order to help them catch up with their sister States in availability of facilities. To accomplish this purpose, the committee drafted a formula that weighted population both for the deficiencies in facilities and for the differences in fiscal ability. The committee accepted per capita income as a sufficient measure of both, since the deficiency seemed to correlate rather well (inversely) with per capita income. Variable Federal percentages for each State were defined in accordance with the basic formula spelled out in chapter VII, namely: 100 percent minus that percentage which bears the same ratio to 50 percent as that State's per capita income (averaged for 3 years) bears to the national per capita income (also averaged for 3 years). A lower limit to the Federal percentage was fixed at 33 1/3 percent and the upper limit at 75 percent. Taken alone, these percentages would be appropriate weights for differences in fiscal ability, as earlier demonstrated. But the committee decided to multiply population by the square of that percentage, in order to give weight as well to the greater deficiencies in health facilities in lower-income States.

The committee also provided variable matching of these allotments. The Federal aid was to furnish a varying share of the total cost in each State (within the limits of the State's allotment), equal to that State's Federal percentage, in recognition of differences in the fiscal ability of States to support their end of the program. It should be noted the lower a State's income, the greater would be the effort it would have been called upon to make, because of the effect of the "squaring" operation, or the dual weighting on population. The lower-income States would have received the greater amount of money, but only at the expense of somewhat greater effort. The poorest State, for example, would have had to make about 2 1/2 times as great an effort as the wealthiest State, in order to take up all of its allotment.

The House accepted the allocation procedure without substantive change, but deleted the equalization features of the matching provisions and inserted instead a provision that the States must all expend $2 from their own funds (State, local, and private) for every dollar of Federal aid. In other words, Federal aid would provide 33 1/3 percent of the cost of approved projects in each State.

The result of the House amendment was to increase greatly the already heavier tax effort required of the low-income States as a result of the "square" term in the allocation formula. Table 30 illustrates in detail the differences between the two versions. Column 4 shows that the effort required by the Senate version would have varied from 0.032 percent of income payments in the wealthiest State to 0.081 percent in the poorest State. Under the House version, which became law, the wealthiest State is still called upon for only 0.032 percent of its income payments. As one reads down column 5, however, the amounts may be seen to grow substantially greater than the amounts in column 4, until the poorest State is called upon for 0.485 percent of its income payments, or 15 times as great an effort as that required of the wealthiest States, and 6 times as great as required under the Senate version.

It is true, as columns 8 to 11 indicate, that if the low-income States are able to make the required effort, they will have proportionately more money in their hospital construction programs, especially under the bill as passed, but it will be their own money. And if the low-income States are unable to make the much greater effort the law requires, the original intent of the allocation formula will be weakened further, for the Federal funds for such States with high deficiencies will revert for redistribution to wealthier States with lesser deficiencies, but with fiscal ability sufficient to make the slight tax effort required of them by the law. (S. 1320 would restore the variable matching provision.)

This table may help to highlight the general importance to equalization formulas of preserving a relationship between the Federal allocation and State matching provisions. While the amounts involved in this act are much smaller than those for highways or public assistance, and the act authorizes funds for only 5 years, the table illustrates what happens when equalization allocations are coupled with uniform matching.

Federal aid for construction of school facilities on a regular basis, if only temporarily, has been urged by many. The same reasons that supported increased Federal aid at the present time for airports, highways, hospitals and health centers are at hand to support Federal aid for educational facilities. Various bills have been introduced in the Seventy-ninth and Eightieth Congresses 2/ to serve this purpose, including the Murray-Morse-Pepper bill mentioned earlier (S. 2499 of the Seventy-ninth Congress). Title III of the bill, for planning and construction of educational plant facilities, provides an authorization of $200 million in the first year, $300 million in the second year, $400 million in the third through the tenth years, "and thereafter such sums as the Congress may determine."

This title embodies practically intact the language and principles of S. 191 (The Hospital Survey and Construction Act), as written by the Senate. On the assumption that the deficiency in school facilities is likely to be greater in the lower-income States, it weights population in

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2/ A partial list would include S. 1719 and 2499, and H.R. 4499 of the 79th Congress; and S. 786 and 971 of the 80th Congress.

Table 30.—A comparison of Senate and House requirements for State-local-private matching of Federal hospital construction allotments provided under S. 191, showing amounts as percent of income payments in the State, and per capita amounts

States ranked by 1942-44 per capita income 1/	Non-Federal funds needed to match Federal allotment		Non-Federal matching funds as percent of State income payments		Non-Federal funds per capita		Total Federal and non-Federal funds			
							Amount		Per capita	
	Senate 2/ (in thousands)	House 3/ (in thousands)	Senate	House	Senate	House	Senate 1/ (in thousands)	House (in thousands)	Senate 1/	House
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
Total, 52 States	$64,178	$150,000	0.047	0.111	$0.48	$1.11	$139,178	$225,000	$1.04	$1.57
Total, high-income States	34,888	47,006	.039	.053	.48	.65	58.391	70,509	.81	.98
Connecticut	808	808	.032	.032	.45	.45	1.212	1,212	.68	.68
Nevada	70	70	.035	.035	.45	.45	105	105	.68	.58
California	3,980	3,980	.035	.035	.45	.45	5,970	5,970	.58	.68
New York	5,746	5,746	.035	.035	.45	.45	8,619	8,619	.68	.68
Washington	945	974	.035	.036	.46	.47	1,432	1,461	.70	.71
Delaware	134	150	.037	.041	.47	.53	209	225	.74	.79
New Jersey	1,990	2,338	.037	.044	.48	.56	3.159	3,507	.76	.84
District of Columbia	447	548	.040	.049	.48	.59	721	822	.78	.89
Oregon	596	796	.042	.056	.49	.65	994	1,194	.82	.98
Rhode Island	383	510	.042	.056	.49	.65	638	765	.82	.98
Michigan	2,690	3.738	.042	.058	.50	.69	4,559	5,607	.84	1.03
Massachusetts	2,061	2,866	.042	.058	.50	.69	3,494	4,299	.84	1.03
Illinois	3,855	5,582	.042	.061	.50	.72	6,646	8,373	.86	1.08
Maryland	1,062	1,538	.042	.061	.50	.72	1,831	2,307	.86	1.08
Ohio	3,410	4,938	.042	.061	.50	.72	5,879	7,407	.86	1.08
Pennsylvania	4,725	8,722	.048	.088	.51	.94	9,086	13,083	.98	1.41
Indiana	1,748	3,226	.049	.090	.51	.94	3.361	4,839	.98	1.42
Montana	238	476	.049	.097	.51	1.02	476	714	1.02	1.54
Total, middle-income States	11,168	27,162	.055	.134	.51	1.23	24,749	40,743	1.12	1.85
Utah	311	672	.052	.113	.51	1.11	647	1,008	1.07	1.66
Maine	406	880	.052	.113	.51	1.11	846	1,320	1.07	1.66
Wisconsin	1,521	3,296	.052	.113	.51	1.11	3,169	4,944	1.07	1.66
Kansas	907	1,966	.053	.116	.51	1.11	1,890	2,949	1.07	1.66
Iowa	1,157	2,610	.053	.120	.51	1.15	2,462	3,915	1.09	1.72
Colorado	585	1,320	.055	.124	.51	1.15	1,245	1,980	1.09	1.73
Wyoming	131	308	.055	.129	.51	1.19	285	462	1.11	1.79
Idaho	270	634	.055	.129	.51	1.19	587	951	1.11	1.79
Nebraska	617	1,450	.055	.129	.51	1.19	1,342	2.175	1.11	1.79
Missouri	1,811	4,610	.055	.141	.50	1.28	4,116	6,915	1.15	1.93
Minnesota	1,265	3,220	.056	.143	.50	1.28	2,875	4,830	1.15	1.93
North Dakota	265	702	.056	.147	.50	1.33	616	1,053	1.17	1.99
Vermont	156	414	.056	.147	.50	1.33	363	621	1.17	2.00
Arizona	317	910	.061	.175	.50	1.43	772	1,365	1.21	2.14
Florida	1,172	3.374	.061	.176	.50	1.43	2,859	5,061	1.21	2.14
South Dakota	277	796	.061	.176	.50	1.43	675	1,194	1.21	2.14
Total, low-income States	17,150	71,020	.067	.279	.45	1.85	52,660	106,530	1.37	2.78
Virginia	1,572	4,716	.062	.186	.49	1.47	3,930	7,074	1.23	2.21
New Hampshire	224	674	.062	.186	.49	1.47	561	1,011	1.23	2.21
Texas	3.349	10,476	.062	.193	.49	1.52	8,587	15,714	1.25	2.29
Oklahoma	974	3,464	.063	.225	.47	1.68	2,706	5,196	1.31	2.52
West Virginia	788	3,060	.065	.251	.46	1.78	2,318	4,590	1.35	2.67
Louisiana	1,165	4,522	.067	.262	.46	1.78	3.426	6,783	1.35	2.68
New Mexico	241	978	.068	.279	.45	1.84	730	1.467	1.37	2.76
Tennessee	1,279	5.434	.068	.289	.45	1.89	3.996	8,151	1.39	2.84
Georgia	1.412	6,284	.070	.312	.44	1.95	4,554	9.426	1.41	2.92
North Carolina	1,520	7,092	.070	.327	.43	2.01	5,066	10,638	1.43	3.01
Kentucky	1,109	5.428	.070	.340	.42	2.06	3,823	8,142	1.46	3.10
Alabama	1,188	5,816	.071	.349	.42	2.06	4,096	8,724	1.46	3.10
South Carolina	794	4,082	.072	.372	.41	2.12	2,835	6,123	1.48	3.18
Arkansas	700	3,982	.072	.409	.39	2.24	2,691	5,973	1.52	3.36
Mississippi	835	5,012	.081	.485	.38	2.30	3.341	7,518	1.54	3.46
Total, territories	972	4,812	.073	.360	.41	2.03	3,378	7,218	1.21	3.05
Alaska	37	74	.015	.030	.51	1.02	74	111	1.02	1.53
Hawaii	217	434	.031	.062	.51	1.03	434	651	1.02	1.54
Puerto Rico	718	4,304	.184	1.104	.38	2.30	2,870	6,456	1.54	3.54

1/ As in table 1, Senate Report No. 674, 79th Congress, 1st session.
2/ From table I, Senate Report No. 674. Matching varies inversely with per capita income.
3/ In the House committee version, non-Federal funds must equal twice the Federal allotment.

the ages 4-20 (rather than total population) according to the square of the Federal percentage, as defined above. The Federal funds thus made available to each State are to be used in payment of that State's Federal percentage (equalization reimbursement) of the cost of approved projects within the State. The allocation and matching provisions would thus go hand-in-hand, in the manner originally worked out by the Senate Committee on Education and Labor for the Hospital Survey and Construction Act.

The major question that these formulas leave open is not the problem of securing equalization under a formula, but rather the suitability of a rough measure of need based simply on an inverse function of per capita income. At the time S. 191 was drafted, only a general survey of hospital facilities was available in the form of Public Health Bulletin No. 292, entitled "Health Service Areas, Requirements for General Hospitals and Health Centers." S. 191 provided that a complete and detailed survey should be undertaken by each State, as does S. 2499. Such surveys, if based on reasonably uniform standards from State to State, should yield more nearly accurate information about the extent of the need for the facilities in question, and the findings might, if objective, be introduced into the allocation formulas in place of the rough measure now provided by squaring the Federal percentage. The formula would then read: each State's weighted population equals population (total or of school age) multiplied by the index of need for the facilities multiplied by the Federal percentage.

The States with relatively higher indexes of need, given equalization matching in accordance with the same Federal percentages, would still be required to make somewhat greater fiscal effort. But as prior discussion has indicated, uniformity is preferable to diversity in the Federal share of different programs in order to avoid competition resulting from fortuitous differences in program need.

Other Public Works Grants

If there should be occasion again in the future to encourage construction and investment in public works of all types, rather than just the few regularly aided, the essence of such a program, designed to maintain employment and purchasing power as well as to provide socially necessary facilities, would be timing. Flexibility in the initiation and rate of completion would be essential, even though purely engineering considerations dictated that construction once undertaken should be brought to completion, or at least to a stage where cessation of work would not cause waste.

Because States and local governments would benefit from any such program, and in order to avoid unnecessary or wasteful projects, it is generally agreed that sponsors other than the Federal Government should contribute some part of the cost of such projects. Unless there are special reasons why equalization of the burden of such programs is to be disregarded as a consideration, an equalization type formula is indicated.

But the usual two measures, State need and State fiscal ability, as discussed heretofore, might not be sufficient to provide the type of formula indicated by the total situation. In the first place, need in this case would not be merely need for the type of facility for which a project was proposed, but is also the need of the State or locality 3/ at any given time for any project and for any additional employment opportunities through public works.

Furthermore, the degree of national interest would not be constant for either the type of projects or the timing of the projects. In a period when employment opportunities from ordinary sources are growing, the Federal interest in any additional construction would necessarily lag. When substantially full employment had been reached and further construction might encourage inflation, the Federal interest in many types of construction might become zero or negative.

The simple conventional patterns discussed with respect to other grant-in-aid programs would not be sufficient here. Methods of allocation and of State financial participation might well be devised that would give appropriate weight to these several variables:

(1) The extent of need, from the standpoint of the national economy, for any public works at the time;

(2) The relative ability of the respective States (and/or their local units) to finance such work programs, measured as currently as possible;

(3) The degree of Federal interest in the different types of projects covered by the program;

(4) The relative need of the States and localities for the particular projects in question (a sewer system would generally have preference over a golf links, but in any given case local priorities should be studied).

3/ Depending on whether or not Federal grants were made to States only, or directly to local governments as well. In the latter case, local fiscal ability should also be taken into consideration. An alternative would be to make Federal grants to States and specify intrastate equalization (see appendix A).

POSTSCRIPT

Federal grants that provide all States with a uniform percentage of State expenditures for an aided function appear to be "incentive" grants. Actually, however, the States that are able to provide the service most adequately from their own funds get the most aid from the Federal Government.

The thesis of this study is that it would be better to allocate grants among States directly in accordance with each State's need for the function, and inversely in accordance with the State's own ability to provide the function. The study has spelled out the measures necessary to implement that basic thesis, especially as to major grant programs in the Federal Security Agency.

Taken by themselves, these recommendations, if adopted, would lead to more efficient and economical allocation of Federal aids, and in the course of time should remedy many of the inadequacies of these programs in certain areas, while adding to human welfare by providing greater economic security, better health, and better education.

Taken as a group, the recommendations might go far toward the development of a more rational and orderly pattern of Federal-State-local fiscal relationships. Placing all major Federal grants on an equalization basis would serve to raise the economic health of the Nation by directing aid to depressed areas and so helping to make economically backward regions into better markets and better producers. As a result the broad interests of all regions will be served by giving greater attention to needy regions.1/

1/ Regional development and Federal-aid programs are linked in the Economic Report of the President, transmitted to the Congress January 8, 1947. The report declares, in part, "Wide regions of this country still hold the promise of tremendous economic development. The Government should examine particularly the contribution it can make toward this development by stimulating production and distribution of low-cost hydroelectric energy, by developing flood control and navigation, by improving roads, by enforcing fair competitive rates of transportation, by removing barriers to truck transportation, by land drainage and irrigation projects. We need to rebuild croplands, grazing areas, and forests.

"Federal . . . grant-in-aid . . . programs, particularly those related to health and education, public works, and road and airport construction, contribute greatly toward bringing all sections of the country up to the levels of productivity consistent with American standards of living. I have asked the Council of Economic Advisers to cooperate with the Bureau of the Budget and other Federal agencies concerned, and with State and local advisory committees, to undertake a study of Federal grants to State and local governments to determine to what extent revised standards for the distribution of these grants may take into account more fully the needs for support that exist in various parts of the country," pp. 26-27.

Against the broader background of fiscal and economic policy, grants-in-aid (equalization or otherwise) are but tools. They can be used wisely or unwisely, or not at all. Used wisely, equalization grants may be considered not merely a way to give each State, or each person, an equitable share, but one of the tools for creating a larger aggregate income from which it will be easier to apportion equitable shares.

Equalization grants have, as shown in foregoing chapters, a reason for being without regard to the total national economic and fiscal policy. Their effectiveness will be enhanced, however, if consideration is also given to the amount and allocation provisions of grants in terms of a constructive, conscious economic policy that seeks to promote "maximum employment, production, and purchasing power."2/ Grants then can become one of the tools in a counter-cyclical policy, useful in fighting both depression and inflation. Proper attention to equalization aspects of this use will permit the Federal Government to do more with less. Without equalization, to get funds where they are most needed, it is necessary to spend substantial amounts in many places where the need is small, or where the ability to meet need is great; with equalization, it is possible to direct the amount needed where needed, and at the same time promote greater equity among citizens of different jurisdictions.

Although equalization grants-in-aid are but one piece in the mosaic of intelligent economic and fiscal policy, they can be an important piece.

2/ The purpose stated in the Employment Act of 1946.

APPENDIX A

SPECIAL PROBLEMS OF INTRASTATE EQUALIZATION [1]

If the Federal Government were to adopt equalization as a basic principle in the allocation of grants-in-aid, the goal of equalization might be largely vitiated if the States generally failed to adopt adequate intrastate equalization methods of allocation and of local financial participation. The basic elements are the same for an intrastate as for an interstate equalization plan, namely, (1) a measure of need for the program, (2) a measure of local fiscal ability, and (3) a formula for allocation and/or matching.

If local administrative units do not contribute toward the financial support of the program, only the first and third elements are needed. That is, if the State pays the whole bill, and knows what an equitable program should cost in each locality, it can allocate the funds accordingly, in simple proportion to that need.

If, however, local financial participation is required in the support of the aided function, then the problem requires consideration of all three elements. All three are considered below, with special attention to those Federal Security Agency programs for which a number of States use local administration and local financial participation.

State Measurement of Need in Local Areas

The problem facing the States of measuring differences in need among local areas is substantially similar to many of the problems facing the Federal Government in measuring need among States for purposes of grant-in-aid programs. Certain differences may be noted, however, with respect to each of the functions.

Public assistance.--State plans for public assistance do, or should, require each local administrative unit to apply uniform State standards in measuring need of individuals for public assistance. If mandatory uniform State standards of assistance are applied properly, each local unit should be able to furnish the State agency a local financial budget based upon recipient needs that will reflect in reasonably comparable form the total actual extent of need in each local unit (the local units are counties in most States, but parishes, towns, and cities in a few).

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[1] Much of the material in this appendix was initially prepared for the Social Security Board. For that purpose, the author worked jointly with Dorothy Bucklin West, John Charnow, and Neota Larson, of the staff of the Bureau of Public Assistance. A revision of much of the author's contribution appeared under his name in the Social Security Bulletin, June 1945, in an article entitled "Intrastate Equalization in Financing Public Assistance."

Uniform State standards should assure:

1. That individuals have equal freedom to make application for assistance regardless of where they live in the State;

2. That need and the amount of payment is computed in a uniform manner, taking into account the requirements and resources of individuals applying for, or receiving, assistance, on the basis of a State-wide standard (adjusted for differences in cost of living);

3. That there is uniform consideration of other eligibility factors.

To the extent that States are permitting local units to apply the State plan with substantial variations from unit to unit, the measures of need that result are weakened or invalidated.

Because local practices in these matters have varied in the past, measurement of need for public assistance on the basis of local experience would involve certain inequities. Recipients in areas where strict standards are applied would be penalized compared to those where more generous standards prevail. While under the most favorable circumstances, some deviations must be expected, the State has the responsibility for reducing such variations to a minimum, so that assistance recipients in similar circumstances would receive similar treatment regardless of their geographic location within the State.

Independent measures of need.--It has been suggested from time to time that relative need for assistance in each locality could be measured on the basis of social and economic data available from sources outside the assistance program. Owing to the paucity of such data regularly available for units as small as a county, the field of selection is narrow. One theoretically desirable approach which cannot be used for lack of comprehensive data would be to obtain a measure of the proportion of families in each locality with income below a specified level.

The number of Federal income tax returns filed in each locality might appear to provide a rough basis for comparing relative need. Use of these data would involve the assumption that a local unit with a relatively small proportion of people filing income tax returns would have a correspondingly greater proportion of its population in need. Experimentation with the index based on number of tax returns indicates that it overstates need in agricultural areas and understates it in urban areas since farmers have relatively large amounts of income in kind, not all of which is considered as income for tax purposes, and since the filing of separate returns by husband and wife is more common in urban than in rural areas. It is apparent that both these factors would cause an income-tax-return index to overstate need in rural as compared with urban areas.

Data from the 1940 census have been used by the Bureau of Agricultural Economics to construct an index of the rural level of living for each county in the United States. While these indexes might offer some possibility of measuring of relative need among rural counties, other indexes would be needed for urban areas. Moreover, the fact that they could be revised only once in 10 years raises doubts about their usefulness.

Two major difficulties stand in the way of developing measures of need outside the assistance program. One is that no method has been discovered for testing the validity of measures that may appear to be theoretically sound. The best correlation obtained between recipient rates and an income-tax-return index was only -0.6, but since the recipient rates reflect the lack of uniformity known to exist in the administration of assistance, it is impossible to determine what the correlation would have been had the recipient rates accurately reflected need. The other major difficulty is that the variation in coverage of social insurance and public works programs in the several localities of a State makes broad measures of economic need unsuitable for an assistance program which meets only a varying part of the need. Results of explorations to date suggest, therefore, that while certain indexes might be useful in corroborating or casting doubt on the degree of equity achieved by a specified distribution of funds, reliance on them as a measure of need would be inadvisable.

Administrative measurement of need.--If equitable treatment of needy individuals is attained in practice, the local assistance agency's administrative experience will reflect comparative need in the various localities at the current standard of assistance more accurately than other measures.

In estimating its total needs, each local unit should first estimate the size of case load for the next fiscal period. Such an estimate can be made, based on the number of cases currently receiving assistance and using past experience for the rate of openings and closings. Past experience also will serve as a basis for estimating seasonal variations. It is, of course, an oversimplification to assume that a case load can be projected solely on the basis of statistical data. The administrator should bring to bear all the nonstatistical information he has to test the extent to which the past may be expected to reflect the future. He may, for example, have reason to believe that a declining case load will not continue to go down at the rate of past experience, and he must be free to decide how this knowledge is to modify the prediction. Having admitted the area of judgment, however, it is important that the localities do not abandon careful consideration of the data reflecting their experience for the sake of estimation by "hunch."

The amount of money needed to provide assistance for the estimated case load may then be determined by the use of an average payment. If each local agency has been using the State-wide standards, the current average payment for the case load in that locality should be a valid base to use in estimating the cost. This will be true unless there is reason to believe that new cases will, in their need for assistance, be materially different from the current case load. And when the State agency contemplates changing the standard of assistance during a forthcoming fiscal period, the local agencies should study the effect of the contemplated changes in the standard on payments to a sample number of cases receiving assistance and on rejected applications to determine what proportion might become eligible under the revised standard.

Special studies may be necessary to estimate the cost of carrying out a uniform plan during the period when the State is changing to the uniform plan from an administrative practice which has permitted considerable variation. This should be a transition problem and not a continuous one. Special analyses also will be necessary when the State agency plans to change standards of assistance. Once the estimates supporting requests for funds are set up to reflect the cost of a uniform plan, they will provide the basis for the allocation of Federal and State funds as these become available. The State agency should assume responsibility for establishing the method to be used by the localities in estimating need for funds, and should have the power to review and approve the local estimates in order to determine whether they are adequate to support the State-wide standard. Otherwise, the administrative measures may become noncomparable as between local jurisdictions.

In the final analysis, the only defensible measure of need for public assistance in each locality will be a measure derived from the program itself, and harmonious with the framework of the assistance program. State and local officials may wish to survey the relationship between such measures and measures of need independent of the public assistance program, but such a review should serve mainly to determine local weaknesses in the present application of State-wide standards.

Public health.--As stated in chapter VIII, comparative need for public health service undoubtedly correlates rather well with differences in population. Until adequate information is at hand to justify other measures, an index based on population may be sufficient within States as well as among States. Perhaps a case can be made that there is greater need for public health services in urban areas, and also that there are greater costs associated with public health services in such areas. Definitive studies will be necessary to measure more precisely local need for public health services.

A local public health service is not efficiently administered if dealing with fewer than about 50,000 population; and a somewhat larger number might represent the optimum. A local health unit now is expected to include not only a full-time doctor, but also a full-time sanitary engineer, a staff of full-time nurses large enough to warrant a full-time nurse supervisor, laboratory specialists, a dental hygienist, and health-education workers, as well as clerical and other assistants. Thus the measurement problem differs from that in certain other programs where minimal services can be separately maintained, without too great additional expense, for smaller populations. Many States have developed and encouraged local health districts which include more than one county, as one solution to the problem of efficiency and economy for the small counties and small cities. Many cities are now finding it advantageous to combine their health departments with those of the surrounding county or counties. The existence of such arrangements, or the desirability of promoting them, should be kept in mind in devising measures of local need to be used in apportioning public health aid.

Education.--Historically, more has been done to quantify comparative local need for education than for any other local governmental service. School census data, enrollments, attendance, classroom units, teacher-units, pupil-teacher ratios, and many other measures have become widely familiar because of the intense study given to securing equitable State aid for local school units.

That is not to say that the problem is fully solved, but only that most of the necessary tools are at hand. If anything, perhaps too much attention has been given to hairline refinements in these measures, and too little to securing financial and administrative patterns that will secure the equitable opportunities for education so generally sought.

Because it has been so easy to secure agreement upon measures of need for even the smallest school district, many States have created patterns of State aid that have perpetuated uneconomic school districts, and have in effect denied many children the opportunity that would rightfully be theirs in other localities. The one-room school has a place in the memory of Americans, but little place in the educational framework of today. No teacher can do justice to all of her students when she must divide her time into so many fragments for so many different age groups. (Perhaps it might have been better had we not had so ready a multitude of measures of need, and been forced to measure need for units no smaller than counties!)

Equal educational opportunity is unlikely to be attained so long as State aids are divided among many more units than counties and large cities; some counties even are too small from this standpoint. Elaborate division of aid perpetuates the type of situation obtaining in at least seven States, where there are more local school-board members than there are teachers! Furthermore, though one may be able to obtain good measures of need for smaller units, it is open to serious question that one can obtain equally good measures of local fiscal ability for these small units; thus the seeming equity inherent in the measure of need may be (and often is) weakened or destroyed by the inequity of the accompanying measures of local fiscal ability.

The problem now is not to measure local need for education, but to agree upon the size of the local unit for which to measure need.2/ Once agreement has been reached upon the size of the unit it may not be hard to find agreement upon the rest of the problem. Daily attendance figures, density of population, salary schedules, known cost differentials, and many other series are at hand to solve the mathematical problems--given the size of the local unit.

Equalization Apportionments, Given No Local Financial Participation

Whenever the State pays the full cost of these programs, from its own and Federal funds, yet chooses to have them administered at the local level, it is relatively easy to make apportionments among localities in accordance with the need index for each local area. If the index need has been written into the State law, or into regulations adopted under the law, the administrator is engaged in a process largely clerical or technical, involving little discretion. But where, as in public assistance for example, it would be all but impossible to define need in statutes, the administrator will be called upon to apply some measures of need so that he can satisfy himself and others that his apportionments will make possible throughout the State equal treatment of persons in equal circumstances.

When State funds are adequate to meet needs in full, the problem is easiest to solve. When State funds are inadequate, the administrators should apportion the limited funds equitably, so as to meet a uniform part of need in all local units, or else modify the standards of measurement of need, so as to stay within the amount of funds available. Especially in States with low economic resources, the need for public assistance and other services may be greater than the amount of available funds. All States are likely to face a situation at some time or other when lack of funds is acute. It is futile to talk about equity when, because of inadequate total funds, assistance payments become so low that they bear no resemblance to any reasonable

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2/ Nor is there any virtue in sheer bigness, especially when it becomes the tremendous size of the school systems of Chicago or New York City. There is an optimum size, and State aid arrangements have often defeated the possibility of attaining that optimum size. On the other hand, very small school systems may conceal situations bordering on anarchy, or conceal petty despotisms. The exodus from the teaching profession during the entire period of a favorable labor market should be ample evidence that present administrative arrangements, coupled with the financial difficulties, do not make for good teacher morale.

standards of need. Nevertheless, a State agency should be in position to assure that the method of meeting the situation created by lack of funds is used uniformly throughout the State. Equalization grants from the Federal to the State governments may provide the only satisfactory answer to the problem of adequacy for some States.

Special Problems of Local Financial Participation

Many States have taken over full financial responsibility for one or more of the programs discussed. A number of others have continued to assume greater and greater responsibility through increased aids and through shared taxes. All States have recognized in some measure the superiority of their own financial powers over those of most (if not all) of their local units, and have made grants to local units to aid in the financing of these programs.

Although the Social Security Act requires that there must be some State financial participation, the States are free to determine whether or not there shall also be local financial participation, and the extent of such participation. For reasons appearing below, the author believes that it might be well if the States would generally abandon local financial participation in the welfare program, or in any case, at least minimize it.

Because of variation among localities in taxable capacity, local financial participation impedes the achievement of the equitable treatment of needy individuals in different localities of the same State. The requirement of a large proportion of local funds tends to lessen the degree to which the State agency can establish and maintain a State-wide standard of assistance and administration (this is not so general nor so serious a problem in other functional areas--such as health and education). Furthermore, no matter what sanctions may exist, there will always be difficulties associated with obtaining the full degree of local fiscal performance required. As has been demonstrated in a number of States, the value of local interest in the administration of public assistance need not be impaired by lack of local financial participation. Finally, local financial participation may be a reason for the continuation of the uneconomical practice of maintaining separate administrative units in very small political subdivisions.

Fiscal reasons for abandoning local financial participation also may be advanced. In most States major reliance is placed upon the property tax as the base for local levies. Hence, the effect of requiring a substantial proportion of local funds for public assistance is to increase the burden of taxation on real property, generally considered a regressive form of taxation. Moreover, the inability to increase property tax revenues rapidly may be a major handicap to the adequate support of the general assistance program in times of acute and widespread need.

Abandoning local financial participation also would relieve the pressure on local tax bases and thus benefit local functions which are not now aided by either the Federal or State governments. Finally, just as the social insurance programs spread the cost of unemployment and old-age and survivors' benefits over a geographical base broader than the local unit, so it is appropriate to spread the cost of public assistance over the broadest geographical base possible within the Federal-State plan of operation.

More than half the States required local financial participation in 1946 in one or more of the three special types of public assistance for which there is Federal aid. All but two States require local participation in the cost of general assistance. Most State laws specify that the share borne by each locality shall be a fixed and uniform proportion of the amount expended for assistance within the locality. Since fiscal ability bears no uniform relationship to total need, the relation between the amount each locality is able and willing to raise and its total need varies markedly from locality to locality. Because what the local unit can raise determines the total amount to be expended, in most cases, that total bears a varying relationship to total need from locality to locality and does not result in equitable treatment of individuals in similar circumstances throughout the State.

Even if it could be assumed that each locality made available funds sufficient to meet all need, the fact that local ability to provide funds tends to vary inversely with the extent of need 3/ would result in an unequal fiscal burden among counties. Studies of experience in several States indicates inequality of fiscal burden among localities under present financial arrangements; undoubtedly with the present degree of local autonomy, the incidence of the local financial burden generally is highly fortuitous.

Regardless of the action that will be taken with respect to local financial participation in social security programs, it is wholly reasonable to expect continuance of the pattern of local financial participation in welfare, health, and education services. The undesirability of local financial participation seems especially marked in public assistance.

Where there is local financial participation, there cannot be equalization in the apportionment of State aids without adequate measures of local fiscal ability.

3/ The incidence of poverty bears the same general relationship to fiscal ability among counties as among States. Nor is it surprising that the areas with the lowest economic resources also tend to have the greatest proportion of their population in need of public assistance.

State Measurement of Local Fiscal Ability

Components of fiscal ability.--The ability of a local unit of government to obtain revenue depends not only on its economy but also on the State constitution and laws, and in many cases on State fiscal administration. Whatever fiscal powers a locality has are granted to it by the State. Most commonly, such powers include a property tax, certain fines and fees, and occasionally the power to tax certain sales. Many States share with their local units the proceeds of certain State taxes and also make grants to local units for general or specific purposes.

Because State fiscal systems differ, no single measure of fiscal ability is applicable in all States. The action of the State, as author of local powers, determines the appropriate measures. A State can alter the fiscal positions of its local governments by developing new tax bases for their use, by increasing the use of shared taxes, or by changing allocations of general aids and shared taxes. Any change in the components of local fiscal ability should be reflected in changes in the measurement of fiscal ability. For the most part, however, local governments must depend for the major part of local revenues on a tax base that cannot move to escape taxation. The largest part of the local tax burden, therefore, will continue to fall on real property.4/

Because of the growing use of State income payments as a measure of State fiscal ability, it occasionally has been suggested that income payments in each local unit be used as a measure of local fiscal ability. The Department of Commerce series on State income payments generally has been accepted as valid for measurement of the relative fiscal ability of States. No similar index of income payments, however, has yet been developed for counties. Recently, however, various sizeable components of county income data have become available from the Census of Agriculture, the Bureau of Old-Age and Survivors Insurance, and (potentially) from the Bureau of Internal Revenue. Therefore, prospects for development of such an index in the near future are quite good.

Though local fiscal patterns are diverse, all include the property tax. In 1942, that tax provided more than 50 percent of total local governmental revenues in all but 11 States, and 62 percent in all States combined. Of local governmental revenues not specifically dedicated to various purposes, however, it may constitute almost 90

4/ This is also the viewpoint of the Treasury Committee on Intergovernmental Fiscal Relations, which suggested as a possible improvement in these circumstances a local tax on current income from real estate; op. cit., pp. 409-410.

percent. In every State it is a factor to be considered in measuring local fiscal capacity; in most States, it may deserve a major place.

Nearly all of the approximately 40 State plans now in effect for intrastate equalization in financing education make some use of the property tax in measuring fiscal capacity. Under these plans the States commonly measure local fiscal ability by combining the estimated proceeds of an assumed uniform property-tax levy with certain other tax receipts and grants for education. Equalization aids for education, however, are usually but a small part of total expenditures for education; in only 9 States does such aid furnish more than 15 percent.

Revenues other than the property tax account for the remaining 38 percent of local revenues. These are classified by the Bureau of the Census as grants-in-aid, other nontax revenues, and other taxes. Grants-in-aid constitute about 25 percent of local revenues. About one-fourth of these grants are for public assistance and about two-thirds are earmarked for other special purposes, mostly schools and roads; only 11 percent are for unspecified purposes. Nontax revenues other than State aid account for about 8 percent of local revenues. These comprise mostly charges for current services and special assessments but also include fines, penalties, and interest. Other taxes, mostly licenses and fees, account for about 5 percent of local revenues.

Because many of these nonproperty tax revenues are dedicated to specific purposes a State setting up an equalization plan must decide what part of these revenues should be considered as part of local ability to finance the aided functions. For example, probably not more than 20 or 25 percent of these revenues is potentially available to support public assistance.

The property tax component.--In most States, as noted above, the property tax represents the major part of local fiscal ability. Thus the base of that tax--property assessments-- is important in most measures of local fiscal ability. Since the intrastate distribution of millions of dollars may depend on property assessment data, the validity of these data as a measure of local fiscal ability, their limitations, methods of improving them, and the use of alternative measures of fiscal ability should have careful consideration.

Five major factors have been cited which impair the comparability of property assessment data: 5/ (1) the complete escape of some property

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5/ Silverherz, Joseph D., The Assessment of Real Property in the United States (Special Report No. 10), the New York Tax Commission, Albany, 1936, pp. 209-213.

from the tax rolls; (2) rigidity, that is, failure to adjust assessments to changes in actual values; (3) inequalities among assessment ratios for various types of property: rural-urban, interdistrict, interclass, land and improvements, resident and nonresident ownership; (4) regressivity, that is, the tendency to assess less valuable property at higher ratios to true value; and (5) inequality among individual properties.

Property assessments are generally made by locally elected officials, many of whom have no special training for the task. A few States require that assessments be at some fixed proportion of full value or at different proportions for different classes of property. But most State laws specify that assessments shall be at "full value," "market value," and so on. In actual practice, assessed values vary widely from such norms.

In about three-fourths of the States, some State agency, such as the State Tax Commission, has the right to review the level of assessment in each subdivision and to equalize assessment totals for all local units. That is, the State agency may adjust the total assessment figure for each subdivision upward or downward, so that the totals for all localities will bear a uniform relationship to "full value." Assessment equalization is especially important when the State levies a property tax, since local assessors may then compete in undervaluing property in their districts in order to lighten as much as possible the burden upon their districts of the State tax. The existence of such competition and the inability to cope with it adequately by State equalization of assessment has stimulated the movement to reduce or abandon State general property taxes. More than a dozen States have no provisions for State equalization of assessment; seven of these now require local participation in some or all programs for public assistance. Even when State provisions for equalization of assessments exist, it is difficult for State authorities to make satisfactory adjustment of inequalities in assessments. In about half the States requiring local participation in financing public assistance, for example, the actual extent of State supervision and control over local assessment has been appraised as "negligible" or "slight."

When assessed values are not now equalized or such equalization is inadequate, heavy reliance on these assessments without further improvement for measurement of local fiscal ability as part of a plan of intrastate equalization may both jeopardize the end objective sought and give rise to as many inequalities as it was meant to remedy.

Improving the validity of the measurement of fiscal ability.— When existing data on property assessments do not seem adequate as an index of fiscal ability, several alternatives are open:

1. The State could adopt a program of equalizing property assessments, if it has none, or could improve its program, profiting

from the experience of the States which have had favorable experience with central supervision, control, and equalization of assessment. Major reliance on property assessment data for intrastate equalization may focus so much attention on assessments that the State may find it necessary to take such action to improve the accuracy of this measuring rod.

2. The State might take a drastic step, often recommended by authorities on property assessment, of central assessment by the State, abolishing the institution of local assessment entirely.

3. The State could use some independent measure of local ability, not influenced by the judgment of local assessors, that will be as valid as true-value assessment; various indexes have been tested for this purpose, and one is used in Alabama in equalizing educational aid.

Fiscal capacity measures independent of local assessors.--Alabama's plan for intrastate financial equalization in education 6/ includes a weighted index of county fiscal ability based on six factors: sales tax paid (weighted 6 points); auto licenses paid (5 points); public utility valuation (3 points); and income tax paid, farm income, and value added by manufacture (1 point each).

In a particular State, construction of a valid economic index of local fiscal ability may require omission of some of these factors and inclusion of others. Such an independent measure can closely approximate the relative fiscal ability of the counties as measured by an index of equalized assessed valuations. These measures deserve consideration when inadequate local assessment figures cannot be improved. If shown to be valid, they also may deserve attention as a method of testing other measures of fiscal ability. Finally, some authorities support the use of such an index because it gives weight to the economic ability underlying fiscal ability, holding that it is just as valid, if not more so, to relate fiscal effort to economic ability as to relate it to fiscal ability--the taxable segment of economic ability. If and when a county income-payments series is available, or an income-produced series, it may serve either as an actual measure of fiscal ability in a formula, or as a test of other measures.

Equalization Formulas Embodying Measures of Need and Ability

The basic formula presented in chapter VII is as well suited to intrastate as to interstate equalization. Given measures of need and

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6/ See Cornell, Francis G., and Johns, Roe L., "Alabama's New Index of Local Ability to Pay for Education," The School Executive, June 1941.

of fiscal ability, these can be used to determine the percentage which each local unit should contribute, as well as the amount of State aid to each local unit.

The nature of the problem is modified only by the difference in relationships at the intrastate level. The State can, and often does, prescribe the level of performance it expects of the local units. As a result, it can embody measures of need growing out of a uniform program as defined by the State. The Federal Government is obviously not in the same position with respect to the States.

Public assistance presents the greatest challenge to those who would apply equalization formulas to cooperative State-local programs, because so little has been done, and so much might be done. Equalization schemes in education are well established. Intrastate equalization is also needed in the expanding local health program.6A/

Public assistance equalization.--Since conditions vary widely from State to State, and since there has been little actual experience with public assistance equalization formulas, various alternative formulas or procedures for combining need and fiscal ability indexes are discussed below. All such formulas assume that the amount of the contribution by each locality will bear a uniform relationship to its fiscal ability and that there will be uniform standards of administration in practice.

Full attainment of the objective of equitable treatment of recipients in similar circumstances should mean not only that a State plan will achieve a high degree of equalization throughout the State in meeting the need of recipients but, further, that under the formula and procedures used, the burden of raising local funds will fall equitably in relation to the fiscal ability of each locality. As long as the amount of funds to be provided by individual localities is expressed in terms of a fixed uniform percentage of the total expenditure in each locality, it is all but impossible to achieve that objective.

Two general types of financial procedures can be used in place of the present uniform-matching-percentage method. Under the first, States would abandon the percentage basis of expressing local financial responsibility and substitute periodic determination of the aggregate dollar amount to be raised by each locality; the first two plans discussed below embody this type of procedure. The second general procedure retains the percentage basis but varies the percentage from locality to locality in accordance with local differences in need and in fiscal ability; the third plan, below, utilizes this variable-percentage basis.

6A/ See the 1947 release of the Committee on Administrative Practice of the American Public Health Association summarizing the formulae used by 8 States for allocating State funds to local health departments.

The three plans outlined below are intended to illustrate various financial and administrative procedures which could be adapted for use in actual intrastate equalization plans. In order to illustrate these procedures, it has been necessary in each case to make certain assumptions. For example, assumptions have been made in the illustrations regarding the general scale of local contributions and their upper limits, and regarding indexes of local fiscal ability. It is not intended, however, to imply that the specific assumptions used in any way represent ideal provisions.

Plan 1--Local contributions combined with Federal and State funds in State treasury.--Under this plan the State would determine periodically the dollar amount of local funds to be provided by each locality, on the basis of the total amount of public assistance costs to be carried by all localities and the percent of fiscal ability in each locality. These amounts would then be paid by the localities into the State treasury and would be added to Federal and State funds. The sum of Federal, State, and local funds would then be allocated among localities according to need. The inability of any locality to remit its entire contribution to the State treasury would not directly affect the amount of funds available for assistance in that locality, although the total amount distributed among all localities would be affected to the extent of that failure unless the State made up the deficiency. Thus, the effect of tax delinquency or other factors which prevented a locality from raising its full contribution would be spread uniformly across the State. Achieving equitable treatment of needy individuals might be easier under this procedure than under the other two plans.

Under plan 1, the upper limit of the total local contributions throughout the State must be less than the total amount of non-Federal funds, since there must be some State financial participation. Under this plan, however, there is no direct limit to the relationship between any locality's contribution and its assistance budget. It is conceivable that there may be localities which are so wealthy, in relation to the amount of their assistance needs, that this plan could operate to obtain from them local contributions greater than their assistance budgets.

The determination of the amount of local funds assessed from each locality would involve the following specific steps: (1) The State would construct an index of the fiscal ability of its localities, using such data as are pertinent in light of the State's fiscal structure. If equalized property assessments were considered an adequate measure of local fiscal ability, these alone would be used; if not, other measures might be included. (2) The State would convert the basic data in the ability index so that the index number for each locality would be the percentage which its own fiscal ability is of total local fiscal ability in the State. (3) The State would then compute the dollar amount of local funds for public assistance required from each locality by applying the fiscal-ability percentage computed in step 2 to the aggregate amount of local funds to be raised for public assistance throughout the State.

Table 31 illustrates how this plan would work out in a hypothetical State by using idealized adaptations of actual data for actual counties. The hypothetical State is assumed to have a population of 3 million persons, an annual public assistance budget of $10 million, and property which, when its valuation is fully equalized, is assessed at $3 billion.

The assumed property assessment figures (column 4) are a simple representation of the index which the State might develop as the first step in the application of the formula. The second step requires determination of the percentage of total local fiscal ability possessed by each individual county (column 5). In carrying through the third step, it is assumed that the legislature has decided that the amount to be raised from local funds is $1.5 million and that the State would provide the amount of the public assistance budget not covered by Federal grants. The amount for each locality (column 6) is then determined by multiplying $1.5 million by the percentages shown in the fifth column.

Under this first plan, therefore, the State would call the locally raised funds into the State treasury, add its own and Federal funds, and then allocate the $10 million total among all of the counties in accordance with the amount of their approved budgets for public assistance. Column 7 shows the percent of its approved assistance budget which would be raised by each locality.

Plan 2--Each local contribution retains its identity and is supplemented by Federal and State funds in the amounts required to meet need.--Under this second type of equalization plan, as under the first, the State would periodically determine and specify for each locality the dollar amount of local funds it must raise for public assistance. Unlike plan 1, however, the locally raised funds in each case would remain to the credit of the locality instead of being pooled, though the moneys actually would be sent to the State if assistance checks are centrally issued. The total amount of funds available for expenditures in each locality would consist of the local funds initially raised plus Federal and State funds, which would be equivalent to the difference between the total approved public assistance budget in each locality and the amount to be provided locally.

In determining the amount of local contributions under this plan, two factors would operate to set a maximum. In the first place, the contribution of any locality would normally be less than half of the amount estimated to be needed for public assistance in that locality, Table 31.--Illustration of operation of intrastate equalization plan 1 in a hypothetical State

[Amounts in thousands]

County	Population	Approved annual public assistance budget	Equalized property assessments	Fiscal-ability index (col. 4 as percent of State total)	Local contribution	
					Amount 1/	Percent of county assistance budget
(1)	(2)	(3)	(4)	(5)	(6)	(7)
Total........	3,000	$10,000	$3,000,000	100.00	$1,500	15.0
Madison............	498	1,160	578,000	19.27	289	24.9
Lafayette..........	318	1,110	306,000	10.20	153	13.8
Park...............	267	1,190	260,000	8.67	130	10.9
Boone..............	258	600	500,000	16.67	250	41.7
Washington.........	207	590	210,000	7.00	105	17.8
Franklin...........	204	480	166,000	5.53	83	17.3
Adams..............	174	590	154,000	5.13	77	13.1
Houston............	141	290	96,000	3.20	48	16.6
Clay...............	117	300	132,000	4.40	66	22.0
Lincoln............	114	620	78,000	2.60	39	6.3
Green..............	111	590	60,000	2.00	30	5.1
Monroe.............	105	490	102,000	3.40	51	10.4
Jackson............	102	530	54,000	1.80	27	5.1
Grant..............	78	340	36,000	1.20	18	5.3
Stone..............	75	320	64,000	2.13	32	10.0
Jefferson..........	66	160	32,000	1.07	16	10.0
Union..............	51	190	54,000	1.80	27	14.2
Lake...............	42	200	54,000	1.80	27	13.5
Winnebago..........	39	150	46,000	1.53	23	15.3
Canyon.............	33	100	18,000	.60	9	9.0

1/ The contribution for each locality is derived by multiplying the assumed aggregate of local contributions ($1.5 million) by the percent of fiscal ability in each locality, shown in column 5.

it could never exceed the total amount.7/ This limitation also applies to plan 3, below, but not to plan 1 because under plan 1, contributions of all localities are combined in the State treasury with State and Federal funds before being allocated for meeting assistance costs. In the second place, the burden on each locality is limited by the burden imposed on the wealthiest locality, since full equalization under State-local sharing of public assistance costs requires that the relative fiscal burden for any locality be no heavier than that for any other locality. In effect, the State's determination of the proportion which the wealthiest locality is to finance of its total assistance budget thus sets a limit to the total amount of local contributions.

Two methods of computing the local contributions under plan 2 are illustrated in tables 32 and 33. Table 32 is based on the assumption that equalized assessments of property are used as an index of local fiscal ability. Under this assumption, the following successive steps might be applied in computing the local contribution for each locality.

(1) The State would use the total dollar amount of equalized property assessments in each locality as an index representing in dollar terms the total fiscal ability of each locality (column 3).

(2) The ratio of the total approved assistance budget for each locality to its index of total fiscal ability would be computed in order to determine the locality having the lowest ratio--i.e., the "wealthiest" locality in relation to need. The ratios shown in column 4 indicate that Boone County is the "wealthiest" county.

(3) A decision must be made as to the proportion of public assistance costs to be borne by the wealthiest locality. Application of this proportion to the ratio computed in step 2 for that locality would indicate the uniform tax rate which could then be imposed upon the property rolls of each locality. The table assumes that the wealthiest county shall provide from its own funds 20 percent of the total approved budget. Accordingly, the uniform rate is determined by multiplying the ratio for Boone County (.0012) by 20 percent; this yields the rate of .00024, equivalent to .024 mills per dollar, or $0.24 per $1,000 of property.

(4) The amount of local funds to be provided by each locality would be determined by applying the uniform rate to its assessment

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7/ States are not required to distribute Federal funds to each locality in the same proportion to the total as received by the State. Customarily, however, States have done so, using the same basic formula as that used in making Federal grants to States. Normally, therefore, each local unit's share will be less than half the total expenditure for public assistance therein.

Table 32.--Illustration of operation of intrastate equalization plan 2 in a hypothetical State, assuming that property assessments are the sole measure of local fiscal ability

[Amounts in thousands]

County	Approved annual public assistance budget	Equalized property assessments	Ratio of assistance budgets to property assessments 1/	Local contribution	
				Amount 2/	Percent of county assistance budget
(1)	(2)	(3)	(4)	(5)	(6)
Total..........	$10,000	$3,000,000	---	$720	7.2
Madison..............	1,160	578,000	0.002007	139	12.0
Lafayette............	1,110	306,000	.003627	74	6.7
Park.................	1,190	260,000	.004577	62	5.2
Boone................	600	500,000	1/ .001200	120	20.0
Washington...........	590	210,000	.002810	50	8.5
Franklin.............	480	166,000	.002892	40	8.3
Adams................	590	154,000	.003831	37	6.3
Houston..............	290	96,000	.003021	23	7.9
Clay.................	300	132,000	.002273	32	10.7
Lincoln..............	620	78,000	.007949	19	3.1
Green................	590	60,000	.009833	14	2.4
Monroe...............	490	102,000	.004804	24	4.9
Jackson..............	530	54,000	.009815	13	2.5
Grant................	340	36,000	.009444	9	2.6
Stone................	320	64,000	.005000	15	4.7
Jefferson............	160	32,000	.005000	8	5.0
Union................	190	54,000	.003519	13	6.8
Lake.................	200	54,000	.003704	13	6.5
Winnebago............	150	46,000	.003261	11	7.3
Canyon...............	100	18,000	.005556	4	4.0

1/ Boone County has lowest ratio.

2/ Each local contribution is determined by multiplying its assessed valuation by the uniform tax rate of $0.24 per $1,000, or 0.24 mills per $1; this rate is derived by multiplying the ratio for Boone County (0.001200) in col. 3 by 20 percent, the share assumed to be raised locally in the wealthiest county.

figures (column 5). In column 6 the local contribution is shown as a percentage of the county's assistance budget. The total amount of local funds to be provided by all localities is determined by applying the uniform rate (.00024) to the State total assessment figures.

(5) The sum of State and Federal funds allocated to each locality would represent the difference between the local contribution and the locality's approved public assistance budget.

The total amount of funds available for public assistance in any locality and the amount of Federal funds available for distribution within the State would be directly reduced under this plan by the extent that a locality failed to provide the full amount of its local contribution--unless the State makes up the deficiency.

The procedures outlined above resemble those generally used in intrastate equalization of education. It should be noted that, if these procedures result in an average level of local contribution for the State as a whole which is considered to be too low, the only way to raise the level under this plan would be to permit the wealthiest county--or perhaps several of the wealthiest counties--to devote a smaller proportion of their total fiscal capacity to financing public assistance than would be permitted in all other counties. To the extent such steps are taken, full equalization will be impaired.

Table 33 illustrates the use of factors in addition to assessed valuations in an index of fiscal ability under plan 2. It is assumed that property taxes furnish 80 percent of unearmarked local revenues in the State and that shared taxes--taxes collected by the State and returned to the locality--account for 20 percent of such revenues. The successive steps which might then be applied in computing the local contribution for each locality are as follows:

(1) The State would construct a composite index of fiscal ability as a percent of the State total, giving appropriate weights to the various factors included. In computing the composite index (column 7), four times as much weight was given to the assessment series in column 5 as to the shared tax series in column 6.

(2) The ratio of the composite index of fiscal ability to the assistance budget for each locality would be computed in order to determine the locality having the highest ratio--that is, the "wealthiest" county in relation to need. Column 8 shows the ratios obtained by dividing column 7 by column 2 and discloses that Boone County is again the "wealthiest."

(3) Again, a decision must be made as to the proportion of public assistance costs to be borne by the wealthiest locality. Application of this proportion to the approved budget of that county indicates the dollar amount of local funds it must raise. It is assumed in this table that the wealthiest county is to provide from its own funds 20 percent

Table 33.--Illustration of operation of intrastate equalization plan 2 in a hypothetical State, assuming that fiscal-ability index includes property assessments and shared taxes

[Amounts in thousands]

County	Approved annual public assistance budget	Equalized property assessments	Shared taxes	Index of ability			Ratio of ability index to assistance budget 2/	Local contribution	
				Equalized assessments as percent of total	Shared taxes as percent of total	Composite ability index 1/ (in percent)		Amount	Percent of county assistance budget
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Total......	$10,000	$3,000,000	$20,000	100.00	100.00	100.00	---	3/ $890	8.9
Madison.........	1,160	578,000	768	19.27	3.84	16.18	0.000014	144	12.4
Lafayette.......	1,110	306,000	950	10.20	4.75	9.11	.000008	81	7.3
Park............	1,190	260,000	940	8.67	4.70	7.88	.000007	70	5.9
Boone...........	600	500,000	144	16.67	.72	13.48	2/ .000022	3/ 120	20.0
Washington......	590	210,000	902	7.00	4.51	6.50	.000011	58	9.8
Franklin........	480	166,000	1,000	5.53	5.00	5.42	.000011	48	10.0
Adams...........	590	154,000	1,022	5.13	5.11	5.13	.000009	46	7.8
Houston.........	290	96,000	1,206	3.20	6.03	3.77	.000013	34	11.7
Clay............	300	132,000	798	4.40	3.99	4.32	.000014	38	12.7
Lincoln.........	620	78,000	1,204	2.60	6.02	3.29	.000005	29	4.7
Green...........	590	60,000	1,336	2.00	6.68	2.94	.000005	26	4.4
Monroe..........	490	102,000	942	3.40	4.71	3.66	.000007	33	6.7
Jackson.........	530	54,000	1,346	1.80	6.73	2.79	.000005	25	4.7
Grant...........	340	36,000	1,408	1.20	7.04	2.37	.000007	21	6.2
Stone...........	320	64,000	1,050	2.13	5.25	2.75	.000009	24	7.5
Jefferson.......	160	32,000	1,388	1.07	6.94	2.24	.000014	20	12.5
Union...........	190	54,000	860	1.80	4.30	2.30	.000012	20	10.5
Lake............	200	54,000	654	1.80	3.27	2.09	.000010	19	9.5
Winnebago.......	150	46,000	750	1.53	3.75	1.97	.000013	18	12.0
Canyon..........	100	18,000	1,332	.60	6.66	1.81	.000018	16	16.0

1/ Weighted average of cols. 5 and 6; assessments weighted 4, shared taxes, 1.

2/ Ratio indicates that Boone County is the "wealthiest" county.

3/ Boone County is assumed to raise 20 percent of its total budget, or $120,000. Dividing this amount by Boone's percent of fiscal ability (13.48) total local contributions would be $890,000. Applying percentages in col. 7 to this figure gives amount of contribution for each locality. In determining proportion of budget of wealthiest county to be financed by county itself, account should be taken of total local contributions for whole State resulting from such proportion.

of its public assistance costs. Boone County thus needs to raise $120,000.

(4) The total amount to be provided by all localities in the State is determined by dividing the dollar amount to be raised by the wealthiest county, as determined in step 3, by the percent of total local fiscal ability in that county, as indicated by column 7. The dollar contribution of each of the other localities is determined by multiplying the total amount of local contributions in the State as a whole by the percentage index of fiscal ability for each county. Dividing the local contribution fixed for Boone County under step 3, by its percent of fiscal ability yields a total local contribution figure for all localities combined of $890,000. Column 9 shows the amount each locality would contribute, obtained by multiplying $890,000 by the percentages in column 7. Column 10 shows each locality's contribution as a percentage of its assistance budget.

(5) State and Federal funds allocated to each locality would amount to the difference between its local contribution and its public assistance budget.

Plan 3--Each local contribution retains its identity and is matched with Federal and State funds at a ratio varying from locality to locality.--Under this procedure, the State would require each locality to raise a specified percentage share of its approved assistance budget; the percentage would vary from locality to locality to take account of differences in need and fiscal ability. Federal and State funds would be available, on a matching basis, to meet the remainder. This plan differs from present State plans in that the percentage of local financial participation varies from locality to locality, instead of being uniform throughout a State. The plan is substantially similar to the equalization proposals for a system of variable Federal grants to States previously discussed.

Because the percentage basis would tie the amount of State and Federal funds received to the amount raised by the locality, this plan might be open to some of the same objections raised against present uniform-matching plans, even though it does adjust for unequal fiscal capacity. It is assumed, however, that administrative measures would assure that the payments made under approved budgets of each locality would support uniform State standards of assistance. Moreover, matching each local dollar with a given amount of Federal and State dollars might provide a stronger financial stimulus to maintenance of local fiscal effort at the desired level than plans 1 and 2, in which the amount of Federal and State funds allocated to a locality is independent of the amount raised locally. The smaller the percentage any locality is to contribute, the greater the number of State and Federal dollars each local dollar will attract, and the greater the stimulus which matching may provide.

A self-adjusting full-equalization formula, similar to the ratio-to-average formula, has been used in table 34, which illustrates the operation of plan 3 when applied to the data for the hypothetical State discussed above. Briefly, this formula provides that each locality's percentage contribution shall bear the same ratio to the average local percentage contribution in the State as the given locality's percentage of total local fiscal ability bears to that locality's percentage of total approved assistance budgets in the State.8/ The nonlocal percentage share of the costs in any county is the difference between 100 percent and the percentage resulting from the formula. It can be demonstrated (as in chapter X) that, if each county makes the same fiscal effort (that is, devotes the same proportion of its fiscal ability to public assistance) under this formula, the matching percentages will result in total Federal, State, and local funds which will represent a uniform percentage of total assistance needs in each county; therefore, this can properly be termed a self-adjusting full-equalization formula.

The successive steps which might be applied in computing local contributions under this formula (table 34) are as follows:

(1) the State would construct an index of fiscal ability which would show each locality's ability as a percent of the State total. Appropriate weights would be given to each factor entering into the index. In columns 3 and 5 it has been assumed for sake of simplicity that assessed valuations are the only series used in the index.

(2) The State would construct an index of need, also expressed in percent-of-total terms. The approved public assistance budget of each county (column 2) is converted to a percent-of-total basis (column 4).

8/ In mathematical terms, if L_i equals the percentage contribution for each county, if L_a equals the percent of total assistance costs which the State desires to raise throughout the whole State by means of local financial contributions, if P_a equals the percent of total local fiscal ability in each county, and if P_n equals the percent of total approved public assistance budgets in each county, then the formula can be stated as follows:
$L_i = L_a \times \frac{P_a}{P_n}$; or $\frac{L_i}{L_a} = \frac{P_a}{P_n}$

Table 34.--Illustration of operation of intrastate equalization plan 3 in a hypothetical State, with local-matching percentages averaging 9 percent 1/

[Amounts in thousands]

County	Approved annual public assistance budget	Equalized property assessments	Assistance budget as percent of total (P_n)	Property assessments as percent of total (P_a)	Ratio of ability percentage to need percentage ($P_a \div P_n$)	Local contribution	
						Local-matching percentage $(9 \times \frac{\%\ \text{ability}}{\%\ \text{need}})$ (L_a = 9%)	Amount
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Total.......	$10,000	$3,000,000	100.0	100.00	---	9.00	$900
Madison..........	1,160	578,000	11.6	19.27	1.6612	14.95	173
Lafayette.........	1,110	306,000	11.1	10.20	.9189	8.27	92
Park.............	1,190	260,000	11.9	8.67	.7286	6.56	78
Boone............	600	500,000	6.0	16.67	2.7783	25.00	150
Washington........	590	210,000	5.9	7.00	1.1864	10.68	63
Franklin..........	480	166,000	4.8	5.53	1.1521	10.37	50
Adams............	590	154,000	5.9	5.13	.8695	7.83	46
Houston..........	290	96,000	2.9	3.20	1.1034	9.93	29
Clay.............	300	132,000	3.0	4.40	1.4667	13.20	40
Lincoln..........	620	78,000	6.2	2.60	.4194	3.77	23
Green............	590	60,000	5.9	2.00	.3390	3.05	18
Monroe...........	490	102,000	4.9	3.40	.6939	6.25	31
Jackson..........	530	54,000	5.3	1.80	.3396	3.06	16
Grant............	340	36,000	3.4	1.20	.3529	3.18	11
Stone............	320	64,000	3.2	2.13	.6656	5.99	19
Jefferson........	160	32,000	1.6	1.07	.6688	6.02	10
Union............	190	54,000	1.9	1.80	.9474	8.53	16
Lake.............	200	54,000	2.0	1.80	.9000	8.10	16
Winnebago........	150	46,000	1.5	1.53	1.0200	9.18	14
Canyon...........	100	18,000	1.0	.60	.6000	5.40	5

1/ The formula used here can be adjusted to secure any average level of local contribution desired, within limits discussed in text. To alter the level of local contributions, the value of the constant (L_a), which in this illustration is 9 percent, must be changed. If it is changed upward, it may be necessary to place a limit (usually something less than 50 percent) on the percentage which will be required of any county.

(3) Using the formula given above, the State would compute the ratio of the index of ability to the index of need for each county. Column 6 shows the ratios resulting from dividing column 5 by column 4. The ratio derived for each county is then multiplied by the average percentage of total costs which the State desires to raise by the total of local contributions throughout the State.[9] This computation gives the percentage of its total costs which each locality will have to contribute. The illustrative computations (column 7) assume that the State has decided to raise a State-wide average of 9 percent of total costs through local contributions.

(4) The dollar amount which each locality is to provide (column 8) is then determined by multiplying its approved assistance budget by the local matching percentage assigned to it (column 7). The total amount to be provided by all localities should ordinarily equal the product of the desired average rate of local contribution (9 percent) and the sum of local assistance budgets.

(5) Federal and State funds would be allocated to each county on the basis of the nonlocal matching percentage of the total amounts actually expended locally.

Administration of the Intrastate Equalization Plan

The calculations of fiscal ability should be made on an annual or biennial basis, whichever is more appropriate; important shifts in relative ability are infrequent. The estimated amount of total need in each locality will probably require some revision as economic conditions change, and these changes must be reflected in the allocations. Frequent readjustments may be less urgent if only the three special types of public assistance are included in the equalization plan than if general assistance is also covered. Failure to adjust the allotments quickly to changes in the need for general assistance might prove a serious weakness. The plan should be so devised that, in any given quarter, the State agency can spend more or less than one-eighth of its biennial appropriation. This element of flexibility, as well as authorization for meeting deficiencies when necessary, should be standard provisions in State plans.

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[9] The maximum limits to local contributions, discussed with respect to plan 2, would also operate under this plan--i.e., a locality would not normally contribute over 50 percent and never more than 100 percent of its assistance budget. If the State-wide average local percentage under plan 3 were set too high, however, the percentage for some localities obtained under the formula might exceed the upper limit. The State would then have to reduce the State-wide average local contribution or provide arbitrarily that no locality would contribute more than a specified maximum percentage, such as 40 percent; if the percentages for a few localities were reduced by the latter provision below those derived under the formula, total local contributions would cover a somewhat smaller percentage of total costs than contemplated in the initial choice of the State-wide average local rate.

The three general approaches outlined above differ in form, but in practice, if the same measures of need and ability and the same general scale of local participation were used, each might produce about the same total amounts of public assistance funds in each locality. Actual achievement of such uniform results, however, would require full State-local cooperation.

A State government might find it profitable to pool and correlate all its interests in equalization by creating an interdepartmental committee on intrastate equalization. Such a committee might include, among others, representatives of the Budget Office, Treasury, Office of Equalization and Review, Revenue Department, Auditor's Office, Department of Education, Health Department, Welfare Department, Highway Department, Planning Board, Attorney General's Office, and appropriate divisions of State colleges and universities. Various nongovernmental agencies might also have a valuable contribution to make in this effort.

Intrastate equalization in other programs.--The procedures discussed above with respect to public assistance are all readily adaptable to use in other programs. The measures of fiscal ability need not change, except as earmarking of local revenues for specific programs might be considered to indicate the need for different indexes of local fiscal ability for separate functions. The different measures of need applicable to the other programs could be used in place of those for public assistance in any of the foregoing methods.

In programs other than public assistance there may not be the same insistence upon the relationship of local contributions to State and Federal aid. In other words, the State may expect, but not require, a certain level of local contributions with respect to health or education. This difference does not alter the fundamental principle that State aid should be directly proportional to local need, and inversely proportional to local fiscal ability. The State will want to give consideration to its expectations as to local financial contributions in making aid available, even though such contributions are not required.

When local contributions are expected, but not required, the State will, of course, not be able to use plan 1. It can, however, use plan 2, without enforcing the local contribution. It will probably not want to use plan 3 as it stands in this appendix, but it may want to consider the use of the nonlocal percentage of plan 3 as a weight to apply to the measure of need in making allotments, as suggested, for example, in chapter XI. The State will then have to use some reasonable measure of assumed local contributions, perhaps based on the State-wide average percentage of such local contributions.

Relating Intrastate and Interstate Equalization

As the Federal Government adopts equalization formulas in its own aids, it has every reason to urge that the States do likewise, to help assure that the basic purpose of the equalization principle is served all the way down to the local units, where the program gets translated from dollars and paper into services to the public. Federal-aid acts embodying equalization processes for Federal grants should, therefore, place upon States the responsibility for securing equalization within their own confines.

APPENDIX B

CHRONOLOGICAL DEVELOPMENT OF FEDERAL GRANT LEGISLATION,1/ BY FUNCTION

Title of act	Date	Statute citation	Special purpose	Agency administering	Annual authorization ($) 2/	Basis of apportionment	Minimum grant to each State ($) 3/	Matching shares required	
								Maximum Federal percent	Minimum State percent
EDUCATION									
General (43 U. S. C. Chap. 20)									
Northwest Ordinance of 1785	May 20, 1785	28 Jo.C.C. 375 4/	maintenance of public schools	Geographer		1 section of every township reserved for public schools			
Northwest Ordinance of 1787	July 23, 1787	33 Jo.C.C. 399	" " "	"		" " "			
			religion	"		1 section of every township			
			for a university	"		2 complete townships in every State			
Act for Organization of Territory of Oregon	Aug. 14, 1848	9 Stat. 330	public schools			thereafter 2 sections of every township 5/			
(Distribution of Treasury Surplus)	June 23, 1836	5 Stat. 55	"loans" to States	Treasury	(6/)	proportion to representation in Congress			
Colleges for Agriculture and Mechanic Arts (7 U. S. C. Chap. 13)									
Morrill Act	July 2, 1862	12 Stat. 503	establishment of A & M Colleges	Interior		30,000 acres for each senator and representative in Congress to which State is entitled under census of 1860			
Second Morrill Act	Aug. 30, 1890	26 Stat. 417	more complete endowment	"		$25,000 for each State and Territory 7/			
Nelson Amendment	Mar. 4, 1907	34 Stat. 1281	more complete endowment and preparation of instructors	Agriculture		" " " 8/			
Bankhead-Jones Act	June 29, 1935	49 Stat. 439	more complete endowment	Office of Education	(a) 980,000 (b) 1,500,000	(a) equal shares of $20,000 each (b) total population 9/			
Current Total (permanent)					5,030,000				
Education of the Blind (20 U. S. C. Chap. 6)									
Education of the Blind Act	Mar. 3, 1879	20 Stat. 467	manufacturing and distribution of books and apparatus	American Printing House for the Blind	10,000	number of pupils in public institutions for education of the blind			
Aid to American Printing House for the Blind Acts	Aug. 4, 1919	41 Stat. 272	" " "	" "	(40,000)	" " "			
	Feb. 8, 1927	44 Stat. 1060	" " "	" "	(65,000)	" " "			
Printing House for the Blind Amendments	Aug. 23, 1937	50 Stat. 744	" " "	" "	115,000	" " "			
Current Total (permanent)					125,000				
State and Municipal Marine Schools (34 U. S. C. Chap. 19)									
Marine Schools Act	Mar. 4, 1911	36 Stat. 1353	maintenance and support	Navy		match sums spent locally up to $25,000 per school		50	50
State Nautical Schools Act	July 29, 1941	55 Stat. 607	" " "	Maritime Commission		match sums spent locally up to $50,000 per school		50	50
Current Total (permanent)					sum sufficient				
Vocational Education (20 U. S. C. Chap. 2)									
Smith-Hughes Act	Feb. 23, 1917	39 Stat. 929	(a) salaries--agricultural subjects	Office of Education	10/ 3,000,000	rural population	11/ 10,000	50	50
			(b) salaries--trade, home economics and industrial subjects		10/ 3,000,000	urban population	11/ 10,000	50	50
			(c) preparation of teachers, supervisors, etc.		12/ 1,000,000	total population	13/ 10,000	50	50
Vocational Education Act of 1929	Feb. 5, 1929	45 Stat. 1151	(a) salaries--agricultural subjects	" "	14/ (1,250,000)	farm population		50	50
			(b) salaries--home economics subjects		14/ (1,250,000)	rural population		50	50
George-Ellzey Act	May 21, 1934	48 Stat. 792	(a) salaries--agricultural subjects	" "	(1,000,000)	farm population	5,000	50	50
			(b) salaries--home economics subjects		(1,000,000)	rural population	5,000	50	50
			(e) salaries--trade and industrial subjects		(1,000,000)	nonfarm population	5,000	50	50
George-Deen Act	June 8, 1936	49 Stat. 1488	(a) salaries--agricultural subjects	" "	15/ (4,000,000)	farm population	20,000	16/ 50	50
			(b) salaries--home economics subjects		(4,000,000)	rural population	20,000	16/ 50	50
			(c) salaries--trade and industrial subjects		(4,000,000)	nonfarm population	20,000	16/ 50	50
			(d) salaries--distributive occupations		(1,200,000)	total population	10,000		
			(e) preparation of teachers		(1,000,000)	total population	10,000		
Appropriation Act	June 27, 1940	54 Stat. 632	training defense workers, courses of less than college grade	" "	(15,000,000)	cost of courses, pursuant to plans, approved by commissioner of education			
1st Supplemental Civil Functions Appropriation act, 1941	Oct. 9, 1940	54 Stat. 1033	extended defense-training aid to engineering courses, vocational courses for youth and for youth on N.Y.A. and equipment		(60,500,000)	cost of courses, pursuant to approved plans			
Vocational Education Act of 1946	Aug. 1, 1946	P.L. 586, 79th Cong., 2d Sess.	(a) vocational education in agriculture	Office of Education	10,000,000	farm population	40,000	50	50
			(b) vocational education in home economics		8,000,000	rural population	40,000	50	50
			(c) vocational education in trades and industry		8,000,000	nonfarm population	40,000	50	50
			(d) vocational education in distributive occupations, and for training of teachers for all categories		2,500,000 (15/)	total population	15,000	50	50
Current Total (permanent)					15/ 35,500,000				

See footnotes at end of table.

(Continued)

CHRONOLOGICAL DEVELOPMENT OF FEDERAL GRANT LEGISLATION,1/ BY FUNCTION--Continued

Title of act	Date	Statute citation	Special purpose	Agency administering	Annual authorization ($) 2/	Basis of apportionment	Minimum grant to each State ($) 3/	Matching shares required	
								Maximum Federal percent	Minimum State percent
NATURAL RESOURCES									
Agricultural Experiment Stations and Research (7 U. S. C. Chap. 14)									
Hatch Act	Mar. 2, 1887	24 Stat. 440	acquiring and diffusing practical information	Agriculture		$15,000 annually to each State cooperating			
Adams Act	Mar. 16, 1906	34 Stat. 63	further endowment	"		$15,000 additional annually to each State 17/			
Purnell Act	Feb. 24, 1925	43 Stat. 970	" " "	"		$60,000 additional annually to each State 18/			
Bankhead-Jones Act	June 29, 1935	49 Stat. 436	research in production, distribution and marketing	"	19/ 3,000,000	rural population		50	50
Research and Marketing Act of 1946	Aug. 14, 1946	P.L. 733, 79th Cong., 2d Sess.	research in marketing and distribution, regional research projects	"	20/ (5,000,000)	(a) 20% in equal shares (b) 52%, 1/2 according to rural population and 1/2 according to farm population (c) 25% for a regional research fund for cooperative State programs--discretionary		50 50	50 50
Current Total (permanent)					21/ 12,537,500				
Agricultural Extension Work (7 U. S. C. Chap. 13)									
Smith-Lever Act	May 8, 1914	38 Stat. 372	diffusing information on agriculture and home economics	Agriculture	(a) 480,000 (b) 22/ 4,100,000	$10,000 to each State according to rural population		50	50
Capper-Ketcham Act	May 22, 1928	45 Stat. 711	" " "	"	(a) 980,000 (b) 500,000	$20,000 to each State and Hawaii remainder according to rural population		50	50
Department of Agriculture Appropriation Act	May 17, 1935	49 Stat. 252	employment of specialists in economics and marketing	"	(1,000,000)	discretion of secretary			
Bankhead-Jones Act	June 29, 1935	49 Stat. 438	further development of extension work	"	12,000,000 (23/	$20,000 to each State and Hawaii remainder according to farm population			
	Apr. 24, 1939	53 Stat. 589	" " "	"	(300,000)	discretion of secretary			
Department of Agriculture Organic Act of 1944	Sept. 21, 1944	58 Stat. 742	" " "	"	555,000	same as apportionment in fiscal 1944 of funds authorized by 53 Stat. 589			
Agricultural Extension Amendments of 1945	June 6, 1945	59 Stat. 231	county extension work including assistance in improving standards of living, farm and home plans, work with youth, food preservation, etc.	"	12,500,000 (24/)	(a) $500,000 according to special needs due to population characteristics, area in relation to farm population, other special problems (b) remainder according to farm population		50	50
Current Total (permanent)					31,115,000				
Forestry (16 U. S. C. Chap. 3)									
Weeks Act	Mar. 1, 1911	36 Stat. 961	forest-fire protection	Agriculture	(200,000)	discretionary--on basis of agreements		50	50
Clarke-McNary Act	June 7, 1924	43 Stat. 653	(a) forest-fire protection (b) wind breaks and shelter belts	"	2,500,000 100,000	" " " " " "		50 50	50 50
Cooperative Farm Forestry Act	May 18, 1937	50 Stat. 188	farm forestry and improved living conditions	"	(2,500,000)	" " "			
Department of Agriculture Organic Act of 1944	Sept. 21, 1944	58 Stat. 736	forest-fire protection on critical areas of national import	"	(1,000,000) (25/)	" " "			
Current Total (permanent)					2,600,000				
Wildlife Restoration (16 U. S. C. Chap. 5B)									
Wildlife Conservation Act (Pittman-Robertson Act)	Sept. 2, 1937	50 Stat. 917	Wildlife restoration projects	Interior	(26/)	1/2 by area 1/2 according to number of paid hunting-license holders. Maximum = $150,000	15,000	75	25
Supply and Distribution of Farm Labor (50 U. S. C. App., 1351-1355)									
Supply and Distribution of Farm Labor Act for 1943	Apr. 29, 1943	57 Stat. 70	adequate supply of farm workers--recruitment, placement, training, health, facilities, etc.	Food Production and Distribution, Agriculture	(13,050,000)	need			
TRANSPORTATION									
Highways and Related Projects (23 U. S. C. Chaps. 1-3, 40 U. S. C. Chap. 8)									
Federal-Aid Road Act	July 11, 1916	39 Stat. 355	construction of rural post roads	Agriculture	(25,000,000) (27/)	1/3 according to rural delivery and star-route mileage, 1/3 according to area, and 1/3 according to population. Aid limited to $10,000 per mile.		50	50

See footnotes at end of table.

(Continued)

CHRONOLOGICAL DEVELOPMENT OF FEDERAL GRANT LEGISLATION,[1] BY FUNCTION--Continued

Title of act	Date	Statute citation	Special purpose	Agency administering	Annual authorization ($) [2]	Basis of apportionment	Minimum grant to each State ($) [3]	Matching shares required	
								Maximum Federal percent	Minimum State percent
TRANSPORTATION--Continued									
Highways and Related Projects (23 U. S. C. Chaps. 1-3, 40 U. S. C. Chap. 8)--Continued									
Federal Highway Act	Nov. 9, 1921	42 Stat. 212	development of interstate highway system not to exceed 7% of State highway mileage (3/7 primary or interstate, 4/7 secondary or intercounty)	Agriculture	(75,000,000)	1/3 rural delivery and star-route mileage, 1/3 area, 1/3 population. Aid limited to $20,000 per mile [28]	1/2 of 1% of annual appropriation	[28] 50	50
Emergency Relief and Construction Act of 1932	July 21, 1932	47 Stat. 709	available as temporary advances, may be used to match regular apportionments. 7% Federal-aid mileage may be increased gradually when 90% is completed.	"	(120,000,000)	1/3 rural delivery and star-route mileage, 1/3 area, 1/3 population			
Hayden-Cartwright Act	June 18, 1934	48 Stat. 993	to increase employment by emergency construction	"	(200,000,000)	7/8 according to section 21 of Federal Highway Act (1/3 mileage, 1/3 area, 1/3 population) and 1/8 population			
Emergency Relief Appropriation Act of 1935	Apr. 8, 1935	49 Stat. 115	(a) elimination of grade crossings (b) work relief through construction	"	(a)&(b) (800,000,000)	(a) 1/2 population, 1/4 Federal-aid highway mileage, 1/4 railroad mileage (b) 7/8 according to section 21 of Federal Highway Act (1/3 mileage, 1/3 area, 1/3 population) and 1/8 population			
Federal Highway Act of 1940	Sept. 5, 1940	54 Stat. 867	(a) Federal-aid highways	Public Roads Administration, F.W.A.	(100,000,000)	section 21		50	50
			(b) secondary and feeder roads		(17,500,000)	" "		50	50
			(c) grade crossings		(20,000,000)	1/2 population, 1/4 railroad mileage, 1/4 Federal-aid mileage			
			(d) roadside development		(---)			50	50
Defense Highway Act of 1941	Nov. 19, 1941	55 Stat. 765	(a) strategic network of highways needed for national defense	" "	(25,000,000)	section 21		75	25
			(b) bridges and highways		(25,000,000)	discretion		50	50
			(c) access roads to military and defense establishment		(150,000,000)	"			
			(d) flight strips		(10,000,000)	"			
			(e) engineering surveys		(10,000,000)	section 21		50	50
[Postwar] Federal Aid Highway Act of 1944	Dec. 20, 1944	58 Stat. 838	(a) postwar Federal-aid system	" "	(225,000,000)	"		50	50
			(b) secondary and feeder roads		(150,000,000)	1/3 area, 1/3 rural population, 1/3 rural delivery mileage		50	50
			(c) Federal-aid system in urban areas		(125,000,000) (29)	urban population		50	50
Airports (49 U. S. C. 1104)									
Federal Airport Act	May 13, 1946	P.L. 377, 79th Cong., 2d Sess.	development of public airports	Civil Aeronautics Administration	(100,000,000) (30)	75% of appropriation to be apportioned, 1/2 according to population, 1/2 according to area; 25% constitutes discretionary fund		[31] 50	50
HEALTH AND WELFARE									
State and Territorial Homes for Disabled Soldiers and Sailors (24 U. S. C. Chap. 2)									
State Soldiers' Homes Act	Aug. 27, 1888	25 Stat. 450	care of disabled soldiers and sailors	Veterans Administration	(250,000)	$100 per annum per inmate			
Appropriation Act for 1890	Mar. 2, 1889	25 Stat. 975	" " "	" "				50	50
Amendments of 1920	Jan. 27, 1920	41 Stat. 399	" " "	" "		$120 per annum per inmate		50	50
Amendments of 1939	Aug. 1, 1939	50 Stat. 1145	" " "	" "		$240 per annum per inmate		50	50
Amendments of 1943	Dec. 17, 1943	57 Stat. 603	" " "	" "		$300 per annum per inmate		50	50
Vocational Rehabilitation (29 U. S. C. Chap. 4)									
Smith-Bankhead Act	June 2, 1920	41 Stat. 735	vocational rehabilitation of persons disabled in industry and their placement in employment	Office of Education	[15] (1,000,000)	population	5,000	50	50
Vocational Rehabilitation Act	June 5, 1924	43 Stat. 430		" "	[15] (1,000,000)	"	5,000	50	50
" "	June 9, 1930	46 Stat. 524	" " "	" "	[15] (1,000,000)	"	10,000	50	50
Social Security Act of 1935	Aug. 14, 1935	49 Stat. 633	" " "	" "	[15] [32] (1,938,000)	"	10,000	50	50
Social Security Act Amendments	Aug. 10, 1939	53 Stat. 1381	" " "	" "	(3,500,000)	"	20,000	50	50
Vocational Rehabilitation Act Amendments of 1943 (LaFollette-Barden Act)	July 6, 1943	57 Stat. 374	(a) payments to war-disabled civilians	Federal Security		necessary cost			
			(b) training and medical exams			1/2 of necessary expenditures		[33] 50	50
			(c) rehabilitation services for needy disabled individuals			" "		[33] 50	50
			(d) administration of plan			necessary cost of proper and efficient administration			
Maternal and Child Health (42 U. S. C. Chaps. 5, 6)									
Sheppard-Towner Act	Nov. 23, 1921	42 Stat. 224	promotion of welfare and hygiene of maternity and infancy	Children's Bureau	[34] (240,000) (1,000,000)	equal apportionment $5,000 to each State and balance in proportion to population		50	50

See footnotes at end of table.

(Continued)

CHRONOLOGICAL DEVELOPMENT OF FEDERAL GRANT LEGISLATION,1/ BY FUNCTION--Continued

Title of act	Date	Statute citation	Special purpose	Agency administering	Annual authorization ($) 2/	Basis of apportionment	Minimum grant to each State ($) 3/	Matching shares required	
								Maximum Federal percent	Minimum State percent
HEALTH AND WELFARE--Continued									
Maternal and Child Health (42 U. S. C. Chaps. 5, 6)--Continued									
Social Security Act	Aug. 14, 1935	49 Stat. 629	health of mothers and children, especially in rural areas and areas suffering from severe economic distress	Children's Bureau	(3,800,000)	(a) $20,000 to each State; $1,800,000 according to number of live births (b) $980,000 according to financial need of each State for financial assistance after taking into account number of live births (Fund B)		50 50	50 50
Social Security Act Amendments of 1939	Aug. 10, 1939	53 Stat. 1380	" " "	" "	(5,820,000)	(a) $20,000 to each State (including Puerto Rico); $2,800,000 according to number of live births (b) $1,980,000 according to financial need, etc. (B)		50 50	50 50
Social Security Act Amendments of 1946	Aug. 10, 1946	P.L. 719, 79th Cong., 2d Sess.	" " "	" "	11,000,000	(a) $35,000 to each State (including Virgin Islands); and remainder of $5,500,000 according to number of live births (b) $5,500,000 according to financial need, etc. (B)		50 50	50 50
Current Total (permanent)					11,000,000				
Services for Crippled Children (42 U. S. C. Chap. 6)									
Social Security Act	Aug. 14, 1935	49 Stat. 631	services for crippled children, especially in rural areas and areas suffering from severe economic stress	Children's Bureau	(2,850,000)	$20,000 to each State, remainder on basis of need, taking into account number of crippled children in need of services and cost of furnishing such services		50 50	50 50
Social Security Act Amendments of 1939	Aug. 10, 1939	53 Stat. 1380	" " "	" "	(3,870,000)	(a) $20,000 to each State (including Puerto Rico); $1,830,000 on basis of need, taking into account number of crippled children and cost of services (b) $1,000,000 according to financial need of States for assistance, taking into account number of crippled children and cost of services		50 50	50 50
Social Security Act Amendments of 1946	Aug. 10, 1946	P.L. 719, 79th Cong., 2d Sess.	" " "	" "	7,500,000	(a) $30,000 to each State, (including Virgin Islands); remainder of $3,750,000 according to need, etc. (b) $3,750,000 according to financial need, etc.		50 50	50 50
Current Total (permanent)					7,500,000				
Child Welfare Services (42 U. S. C. Chap. 6)									
Social Security Act	Aug. 14, 1935	49 Stat. 633	protection and care of homeless, dependent, and neglected children	Children's Bureau	(1,500,000)	$10,000 to each State, remainder according to State plans, not to exceed proportion of rural population		Part of costs	
Social Security Act Amendments of 1939	Aug. 10, 1939	53 Stat. 1381	" " "	" "	(1,510,000)	" " (including Puerto Rico)		" "	
Social Security Act Amendments of 1946	Aug. 10, 1946	P.L. 719, 79th Cong., 2d Sess.	" " "	" "	3,500,000	$20,000 to each State, remainder according to plans, not to exceed proportion of rural population		" "	
Current Total (permanent)					3,500,000				
Emergency Maternity and Infant Care (42 U. S. C. Chap. 6)									
First Deficiency Appropriation Act of 1943	Mar. 18, 1943	57 Stat. 28	care of wives and infants of enlisted men in 4-7 grades	Children's Bureau	(1,200,000)	cost			
Labor-Federal Security Agency Appropriation Act of 1944	July 12, 1943	57 Stat. 497	care of wives and infants of enlisted men	" "	(4,400,000)	"			
Labor-Federal Security Agency Appropriation Act of 1945	June 28, 1944	58 Stat. 550	care of wives and infants of enlisted men in 4-7 grades and Army aviation cadets	" "	(42,800,000)	"			
Public Health Services (42 U. S. C. Chap. 1)									
Chamberlain-Kahn Act	July 9, 1918	40 Stat. 886	prevention and control of venereal diseases	Public Health Service	(1,000,000)	population		35/ 50	50
Social Security Act of 1935	Aug. 14, 1935	49 Stat. 634	public health services	" "	(8,000,000)	population, special health problems, and financial need			

See footnotes at end of table.

(Continued)

CHRONOLOGICAL DEVELOPMENT OF FEDERAL GRANT LEGISLATION,1/ BY FUNCTION—Continued

Title of act	Date	Statute citation	Special purpose	Agency administering	Annual authorization ($) 2/	Basis of apportionment	Minimum grant to each State ($) 3/	Matching shares required	
								Maximum Federal percent	Minimum State percent
HEALTH AND WELFARE—Continued									
Public Health Services (42 U. S. C. Chap. 1)—Continued									
LaFollette Venereal Disease Act	May 24, 1938	52 Stat. 439	control of venereal diseases	Public Health Service	necessary sums 36/	population, extent of venereal disease problem, and financial need			
Social Security Act Amendments of 1939	Aug. 10, 1939	53 Stat. 1381	public health services	" "	(11,000,000)	population, special health problems, and financial need			
Public Health Service Act	July 1, 1944	58 Stat. 693	(a) venereal disease control, prevention, and treatment	" "	sum sufficient	population, size of venereal disease problem, and financial need		(37/)	(37/)
			(b) tuberculosis control, prevention, and treatment	" "	sum sufficient 38/	population, size of the tuberculosis problem, and financial need		(37/)	(37/)
			(c) general public health services	" "	20,000,000 (39/)	population, size of other special health problems, and financial need		(37/)	(37/)
National Mental Health Act	July 3, 1946	P.L. 487, 79th Cong., 2d Sess.	mental health, research, and treatment	" "	10,000,000 (40/)	population, extent of mental health problem, and financial need		(37/)	(37/)
Current Total (permanent)					30,000,000	plus sufficient sums for v.d. and t.b. control			
Hospital Construction (42 U. S. C. Chap. 1)									
Hospital Survey and Construction Act (Hill-Burton Act)	Aug. 13, 1946	P.L. 725, 79th Cong., 2d Sess.	(a) to inventory existing hospitals, survey need for construction, and	Public Health Service	(3,000,000) (41/)	(a) population	10,000	33 1/3	66 2/3
			(b) construction of public and nonprofit hospitals		(75,000,000)	(b) population times square of allotment percentage. Allotment percentage shall be 100% less that % bearing same ratio to 50% as per capita income of State bears to that of United States. Maximum % = 75, minimum % = 33 1/3		33 1/3	66 2/3
School Lunch Programs (42 U. S. C. 1760)									
National School Lunch Act	June 4, 1946	P.L. 396, 79th Cong., 2d Sess.	establishment, maintenance, operation, and expansion of school-lunch programs	Agriculture	such sums as necessary	75% of sums appropriated: on basis of index which is product of population aged 5-17 and relation of per capita income in United States to per capita income in State		(42/)	(42/)
			nonfood assistance		(10,000,000)	" " "			
ECONOMIC SECURITY									
Relief and Public Works (15 U. S. C. Chap. 16, 40 U. S. C. Chap. 8)									
Federal Emergency Relief Act of 1933 43/	May 12, 1933	48 Stat. 55	defray costs of relief and work relief	Federal Emergency Relief Administration	(500,000,000)	(a) $250,000,000--to reimburse 1/3 of State and local expenditures therefor (b) wherever available funds from all sources fall below estimated needs		33 1/3	66 2/3
National Industrial Recovery Act	June 16, 1933	48 Stat. 202	public works projects	Federal Emergency Administration of Public Works	(3,300,000,000)	discretion		30% of labor and materials	
Emergency Relief and Civil Works Appropriation Act	Feb. 15, 1934	48 Stat. 351	relief	Federal Emergency Relief Administration	44/ (2,150,000,000)	" "		none	
Emergency Appropriation Act for 1935	June 19, 1934	48 Stat. 1056	"	" "	(899,675,000)	" "		none	
Work Relief Act	Apr. 8, 1935	49 Stat. 115	loans or grants for work relief	" "	(900,000,000)	" "		none	
Emergency Relief Appropriation Act of 1936	June 22, 1936	49 Stat. 1608	public works projects	Public Works Administration	(300,000,000)	" "		45% of total cost	55
Public Assistance (42 U. S. C. Chap. 7)									
Social Security Act	Aug. 14, 1935	49 Stat. 620	(a) old-age assistance (b) aid to the blind	Social Security Board	sum sufficient	(a) and (b) 50% of payments made to needy aged and needy blind, excluding amounts in excess of $30 monthly per beneficiary. In addition, 5% of such amounts are granted for administrative costs		50 50	50 50
			(c) aid to dependent children			(c) 33 1/3% of expenditures under approved State plan, excluding amounts paid in excess of $18 for 1 child and $12 for each additional child in the same home per month		33 1/3	66 2/3

See footnotes at end of table.

(Continued)

CHRONOLOGICAL DEVELOPMENT OF FEDERAL GRANT LEGISLATION,1/ BY FUNCTION--Continued

Title of act	Date	Statute citation	Special purpose	Agency administering	Annual authorization ($) 2/	Basis of apportionment	Minimum grant to each State ($) 3/	Matching shares required	
								Maximum Federal percent	Minimum State percent
ECONOMIC SECURITY-- Continued									
Public Assistance (42 U. S. C. Chap. 7)--Continued									
Social Security Act Amendments of 1939	Aug. 10, 1939	53 Stat. 1360	(a) old-age assistance (b) aid to blind	Social Security Board	sum sufficient	(a) and (b) 50% of payments made to needy aged and needy blind, excluding amounts in excess of $40 monthly per beneficiary. In addition, 5% of such amount for administration of old-age assistance, 50% of amount spent for administration of aid to blind		50 50	50 50
			(c) aid to dependent children			(c) 50% of expenditures, excluding amounts in excess of $18 for first child and $12 for each additional child in same home per month		50	50
Social Security Act Amendments of 1946	Aug. 10, 1946	P.L. 719, 79th Cong., 2d Sess.	(a) old-age assistance (b) aid to blind	Social Security Administration	" "	(a) and (b) will reimburse State expenditures to amount of 2/3 of first $15 of average payments in the State times the number of recipients in the State, and 1/2 of the remaining amount excluding all amounts exceeding $45 a month to any individual, and 1/2 of total sums spent for proper and efficient administration		See basis of apportionment	
			(c) aid to dependent children			(c) excluding all amounts in excess of $24 a month for first child and $15 a month for each additional child in same home per month, will reimburse expenditures in amount of 2/3 of first $9 of average payments times number of dependent children and 1/2 of the remainder as well as 1/2 of the administrative expenditures			
Public Employment Offices (29 U. S. C. Chap. 4B)									
Wagner-Peyser Act	June 6, 1933	48 Stat. 113	national system of public employment offices	United States Employment Service	necessary sums 45/	75% according to population balance available for other purposes of act		46/ 50	50
Wagner-Peyser Amendments	May 10, 1935	49 Stat. 216	" " "	" "	" " "	" " "	10,000	"	"
" "	June 29, 1938	52 Stat. 1244	" " "	" "	" " "	100% according to population	10,000	"	"
Labor-Federal Security Agency Appropriation Act for 1947	July 26, 1946	P.L. 549, 79th Cong., 2d Sess.	return of public employment offices to States	" "	(42,823,125)	such amounts as Secretary of Labor determines necessary for the proper and efficient administration of offices		waived until July 1, 1948	
Unemployment Compensation Administration (42 U. S. C. Chap. 7)									
Social Security Act	Aug. 14, 1935	49 Stat. 626	administration of State unemployment compensation laws	Social Security Board	(49,000,000) (47/)	amounts found necessary by Board for proper and efficient administration, taking into account population, coverage, cost, and other relevant factors			
Social Security Act Amendments of 1939	Aug. 10, 1939	53 Stat. 1378	" " "	" "	amounts necessary	" " "			

See footnotes on the following page.

FOOTNOTES TO APPENDIX B

1/ The table summarises all the significant Federal legislation containing grants-in-aid to States, especially permanent legislation, and many temporary acts of general interest. (Excludes Federal grants direct to local units or to individuals within States.)

2/ Permanent annual authorisation. If the authorisation is for a specified number of fiscal years, or has been replaced by a later authorization, it is shown in parentheses. Amounts are not historically complete, because certain appropriation acts for some programs are excluded as having no other significance in the development of Federal grants.

3/ Not shown if the minimum is implied in the apportionment formula, e.g., uniform grants.

4/ Journals of the Continental Congress.

5/ All the remaining States subsequently admitted to the Union, except West Virginia, receive 2 sections per township, and Arisona, New Mexico, and Utah each receive 4.

6/ All funds in the Treasury on January 1, 1837, over and above $5 million were to be placed on deposit with the States as "loans"; the "loans" were never called in. This item is included here for chronological reasons, for lack of any functional grouping.

7/ The Second Morrill Act provided for $15,000 for each State in 1890, increased annually for 10 years by $1,000 until $25,000, and $25,000 annually thereafter.

8/ The Nelson Amendment to the Second Morrill Act provided for an additional lump-sum grant to each State of $5,000 in 1908, increased annually for 4 years by $5,000, and $25,000 annually thereafter.

9/ For the population allotment, $500,000 was authorised for 1937, $1 million for 1938, and $1.5 million annually thereafter.

10/ $500,000 in 1918, $750,000 in 1919, $1 million in 1920, $1,250,000 in 1921, $1,500,000 in 1922, $1,750,000 in 1923, $2 million in 1924, $2,500,000 in 1925, and $3 million in 1926 and annually thereafter, plus additional sums to provide for the minimum allotments.

11/ The minimum provided was $5,000 up to 1923, $10,000 in 1924 and thereafter.

12/ $500,000 in 1918, $700,000 in 1919, $900,000 in 1920, and $1 million in 1921 and annually thereafter, plus additional sums for the provision of the minimum allotments.

13/ The minimum grant provided was $5,000 in 1918 and 1919, and $10,000 annually thereafter.

14/ $250,000 in 1930, $500,000 in 1931, $750,000 in 1932, $1 million in 1933, and $1,250,000 in 1934.

15/ Plus additional sums for the minimum-grant provision.

16/ The George-Deen Act contained a "ratchet" provision for State matching: 50 percent of the Federal funds were to be matched through fiscal 1942, 60 percent in 1943, 70 percent in 1944, 80 percent in 1945, 90 percent in 1946, and 100 percent thereafter.

17/ The Adams Act authorised lump-sum grants of $5,000 in 1906, increasing annually for 5 years by $2,000, and $15,000 annually thereafter.

18/ The Purnell Act provided for $20,000 to each State in 1926, $30,000 in 1927, $40,000 in 1928, $50,000 in 1929, and $60,000 annually thereafter.

19/ The Bankhead-Jones Act provided that 60 percent of the funds appropriated for this purpose were to be allocated among the States; the amounts authorized were $1 million in 1936 and an additional $1 million annually for 4 years, and $5 million annually thereafter.

20/ The Research and Marketing Act authorises $2.5 million in 1947, $5 million in 1948, $10 million in 1949, $15 million in 1950, $20 million in 1951 and thereafter, "plus such additional funds as Congress deems necessary." 3 percent of the funds are available for use of the Secretary. Title II of the act authorises similar sums which may be used directly by the Secretary or may be spent in payments to State experiment stations (in which case they must be matched).

21/ Includes special authorisations of $90,000 for Hawaii (45 Stat. 571) and Puerto Rico (46 Stat. 1520), $37,500 for Alaska (45 Stat. 1256), and $5 million in fiscal 1948 (Research and Marketing Act of 1946).

22/ The Smith-Lever Act increased the amounts authorised for the rural population grants from $600,000 in the second year after the act, by an additional $500,000 annually for 7 years, until the total became $4,100,000.

23/ The Bankhead-Jones Act authorised amounts increasing gradually from $8 million to $12 million.

24/ $4,500,000 in 1946, $8,500,000 in 1947, and $12,500,000 annually thereafter.

25/ "During the existing (wartime) emergency."

26/ Expenditures shall not exceed receipts covered in from proceeds of Federal taxes on firearms, shells, and cartridges.

27/ $5 million in 1917, $10 million in 1918, $15 million in 1919, $20 million in 1920, and $25 million in 1921.

28/ Except that in States containing public lands exceeding 5 percent of their total area, the Federal share (percentage) may be increased by 1/2 the percentage which the unappropriated public land bears to the total area. The maximum per mile, in such cases, may also be proportionately increased.

29/ For each of 3 successive postwar years.

30/ $500 million was authorised for a period of 7 years beginning with fiscal 1947. The maximum appropriation for any fiscal year is $100 million.

31/ In the case of class 4 or larger airports, the Administrator may set the Federal share of allowable costs which, in any event, may not exceed 50 percent. The Federal percentage may be increased in public land States in the same manner provided by the Federal Highway Act of 1921.

32/ The Social Security Act authorized $841,000 for 1936 and 1937, and $1,938,000 annually thereafter.

33/ Except that the Vocational Rehabilitation Act Amendments provided that in the case of any State found by the Administrator to have substantially exhausted its funds available for necessary expenditures specified, he may increase the amounts payable to such States prior to June 1, 1945, under such conditions as he may prescribe.

34/ The authorisations were originally provided for fiscal years 1922-27 only. The Sheppard-Towner Act provided for $480,000 in 1922 and $240,000 for the next 5 years for the equal apportionment. This act was later extended for 2 more years, but died finally in 1929.

35/ The Chamberlain-Kahn Act authorised funds for only 2 years, and the matching requirement applied only to the second year's apportionment.

36/ The LaFollette Venereal Disease Act authorised $3 million in 1939, $5 million in 1940, $7 million in 1941, and such sums as may be deemed necessary thereafter for venereal disease control.

37/ Matching to be determined by regulation.

38/ $10 million authorised for fiscal 1945, and thereafter a sum sufficient.

39/ Of this sum, not to exceed $2 million is available for direct expenditure by the Surgeon General for cooperative work. Also congressional appropriations committees have earmarked certain portions of this sum, on occasion, for special purposes, such as the work of the National Cancer Institute.

40/ Actually, the Public Health Service Act was amended so that the general authorisation was increased from $20 million to $30 million annually.

41/ The $3 million for surveys and plans is to be available until expended. The authorisation of $75 million annually is for each of 5 years, 1947-51.

42/ From 1947 to 1950 every $1 of Federal aid is to be matched by a non-Federal $1; from 1951 to 1955 by $1.50 non-Federal, and thereafter by $3 non-Federal. In the case of any State whose per capita income is less than that of the United States, the matching required for any fiscal year shall be decreased by the percentage which the State per capita income is below the per capita income of the United States.

43/ This act followed the Emergency Relief and Construction Act of 1932 (47 Stat. 709) which authorized the RFC to make loans to States for relief and work relief. The loans failed to stimulate sufficient State-local expenditure and were succeeded by outright grants. The reimbursement feature of the 1933 act was similarly designed to stimulate State and local expenditures for this purpose.

44/ Over $800 million of this money was funneled through the newly created Civil Works Administration, which conducted work projects in an attempt to lighten the burden of direct relief undertaken by the F.E.R.A.

45/ $1.5 million in 1934, $4 million in 1935-38 each, and thereafter such sums as Congress deems necessary.

46/ An equal sum must be appropriated by the State and its agencies, except that the amounts so appropriated by the State (alone) shall not be less than 25 percent of the population apportionment and in no event less than $5,000.

47/ $4 million in 1936, $49 million annually thereafter until 1939 amendments.

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